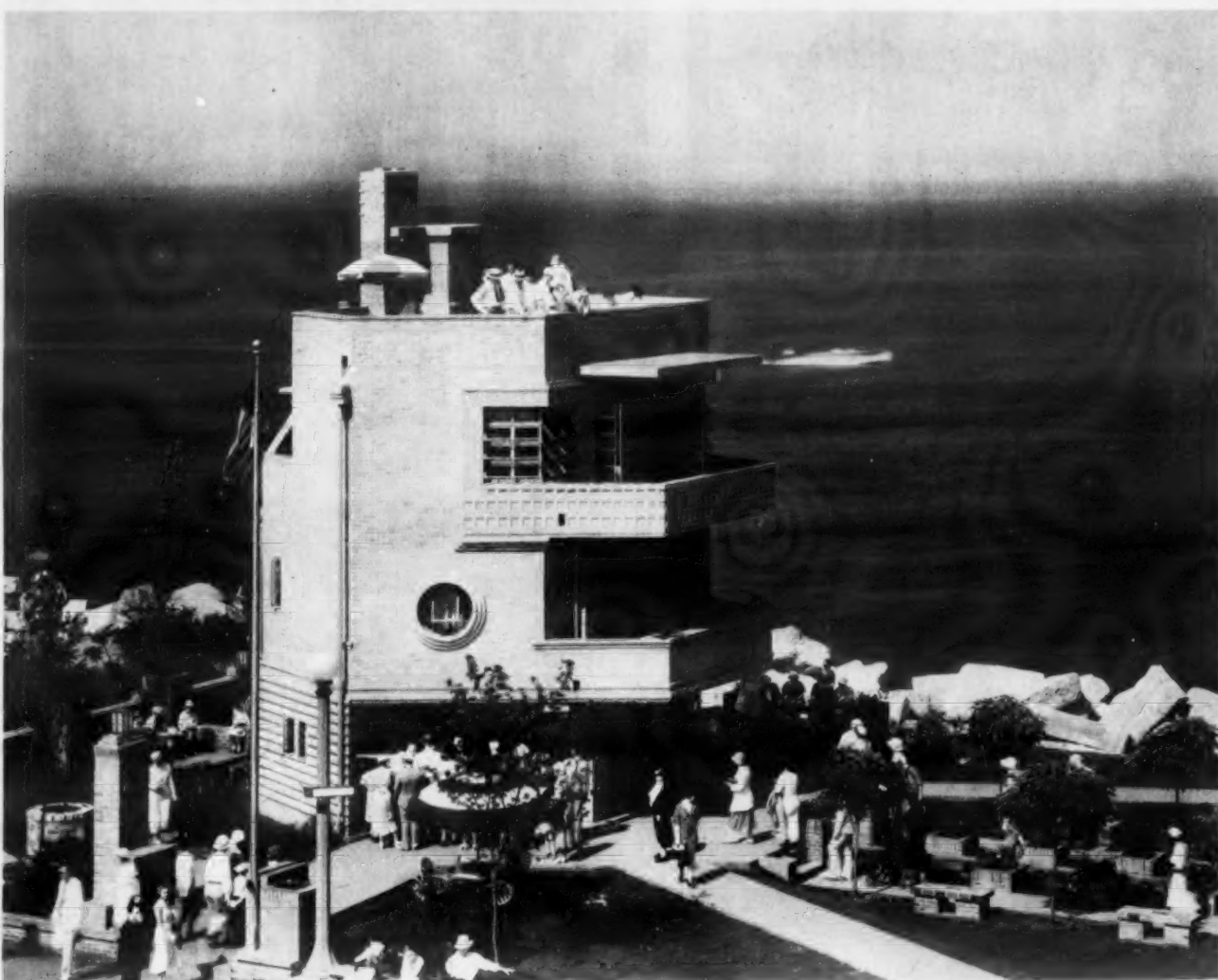
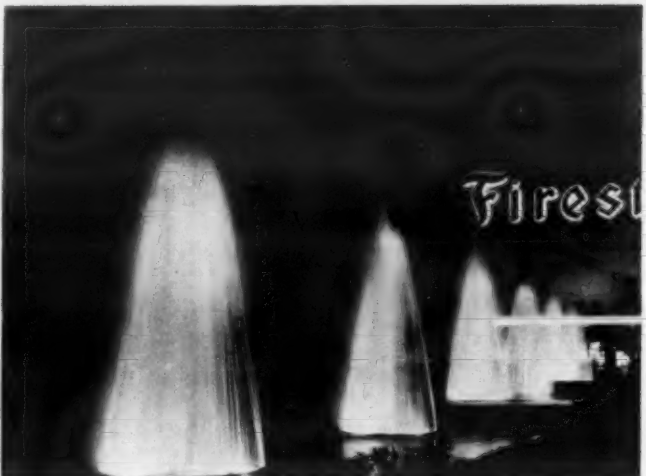
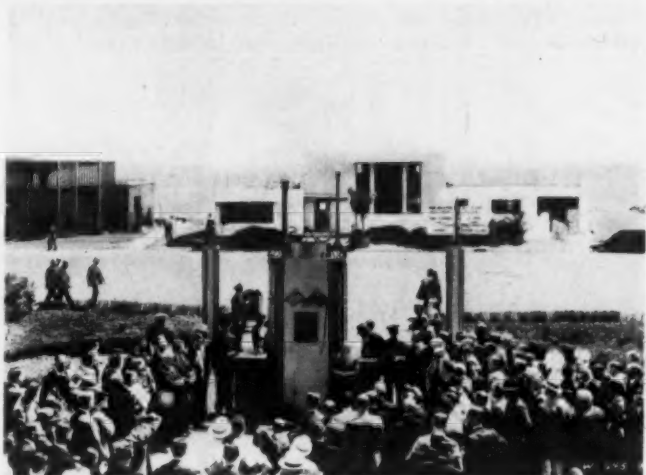




Decorated by Tony Sarg, Toytown Tavern (right) on Enchanted Island is operated by Fred Harvey. Servel refrigeration is used in the dining car type kitchen. Originally intended as a children's restaurant, it is heavily patronized by adults.

Fresh Florida orange juice, brimming with vitamins, is kept cool and refreshing by Servel commercial refrigerating equipment in the Florida state exhibit (left) at the Fair.

Arthur Hewitt, president of the American Gas Association, dedicates the Fountain of Flame (right) at the Gas Industries Exhibit of A Century of Progress. This exhibit is in the center of the modern home district.



Perhaps the most eye-striking of all the modern homes on exhibit at A Century of Progress is this reinforced brick design contributed by the Brick Manufacturers Association. It is built, something like a lighthouse, around a circular stairway, with porches jutting out from the second and third stories. A Servel Hermetic refrigerator is in the kitchen.

Illuminated fountains playing in the court of the Firestone building are a welcome rest to eyes made glittery by the sharply bright colors which predominate A Century of Progress.

Crown Food Co. operates 46 of these "hot dog" stands (which they call "Century Griddles") at the Fair. Each one is equipped with Servel commercial refrigeration.



Andrea Marsh, petite and sprightly torch singer with Ted Weems and his orchestra, is a headline feature at Chicago's Lincoln Tavern.



Jack Campbell, soaring Irish tenor who recently achieved fame as Jean Harlow's new boyfriend, may be heard at the Hangar.



Marion Kingston, lovely and charming dispenser of intricately rhythmic tap dances, is a great favorite with Chicago visitors.



Handsome Al Morris breathes moonlit romance into the songs he sings for Tom Gerun and his Californians at the Chez Paree club.



# REFRIGERATION NEWS

Registered U. S. Patent Office

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matter Aug. 1, 1927THREE DOLLARS PER YEAR  
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## PETRIE NAMED SALES MANAGER OF KELVINATOR

### Strelinger Will Direct Sales of Leonard Division

DETROIT—R. I. Petrie, for the past two years sales manager of the Leonard Refrigerator Co., has been appointed domestic sales manager of Kelvinator Corp. to fill the vacancy left last week when J. S. Sayre resigned to take a position as head of Montgomery Ward & Co.'s household appliance division.

Succeeding Mr. Petrie as Leonard sales manager is Geoffrey Strelinger, formerly manager of Kelvinator Corp.'s Detroit factory branch, according to H. W. Burritt, Kelvinator's vice president in charge of sales.

Vance Woodcox, until last week director of advertising and sales promotion for Kelvinator Sales Corp., has been made advertising and sales promotion manager of Kelvinator Corp. and all subsidiaries, officials have announced.

Mr. Petrie, new Kelvinator domestic sales manager, joined that organization in 1924, and served first as manager of its Cleveland branch, then of its Washington branch. Later he was made an executive of Refrigeration Discount Corp., Kelvinator financing company.

He then became one of Kelvinator's regional sales managers, and stepped from that position into the job as sales manager of the Leonard organization.

## RETAILERS ATTEND BOSTON CONFERENCE

BOSTON—From east, west, north, and south came retail merchandising executives to the fifth annual Boston Conference on Retail Distribution last week to agree that the depression's blackest clouds have passed over us, and that retailers can play a highly important part in assuring success of the NRA.

Significant because it sounded the keynote of the entire convention was the address of General Chairman P. A. O'Connell, president of E. T. Slatery Co. In it he declared that retailers must increase business volume quickly enough to assure maintenance of present improved conditions.

"Increased advertising, more aggressive sales promotion, and better selection of merchandise will do the work if properly employed," he asserted. "In this crucial period, retail advertising will take a most important part. It must give the consuming public a new and more urgent incentive to buy."

Numerous potent remarks on price-fixing came from one of the first session's speakers—Paul Hollister, executive vice president of R. H. Macy & Co. When retailers fix prices, they hurt the consumer, who is the very foundation of a successful business, Mr. Hollister said.

Too many merchants, he continued, spend so much time thinking about their profit sheets that they forget their customers entirely. If they would think first of their customers, the

(Concluded on Page 16, Column 3)

## RADIO MAKERS DISCUSS NEMA CODE PROVISIONS

NEW YORK, Sept. 26.—A special meeting of the Radio Manufacturers Association was held today at the Commodore hotel here for the purpose of informing the members regarding the code of the National Electrical Manufacturers Association under which the radio industry will operate.

A number of questions concerning administration and operation of the code were up for discussion at the meeting. General supervisory authority is vested in the board of governors of Nema, but the RMA has been officially advised that Nema is willing to delegate the active code administrative functions to the RMA executive committee or to committees representing each division of the RMA.

## Sales Manager



R. I. Petrie, former Leonard sales manager, will manage sales of Kelvinator domestic refrigerators, succeeding Mr. Sayre.

## 15 REFRIGERATORS SHOWN IN NEW YORK

By John T. Schaefer

NEW YORK CITY—Showing 15 makes of electric refrigerators and 33 makes of new, higher priced 1933-34 radios, the 1933 National Electrical and Radio Exposition opened in Madison Square Gardens here last Wednesday for an 11-day run.

Sponsored by the Electrical Association of New York, the affair is principally an electrical show for Metropolitan New York, with most of the exhibits manned by representatives of local distributors and factory branches.

It lacks the pomp and grandeur that characterized former N.E.L.A. expositions, but appears to be a real business-building affair, a number of refrigeration distributors reporting actual retail sales for immediate delivery, and finding a good many prospects for new dealers.

### Scene of Exhibit

The large arena (scene of many famous sporting events) which comprises the main floor of Madison Square Garden has been transformed temporarily with attractive interior decorations.

Purple and gold hangings conceal the mechanical structure of the roof, and drop down in front of the sloping balcony seats on each side. A large hemispherical drop in the center hides the battery of loud speakers and improves acoustical properties of the huge room.

On the floor below the arena is exposition hall in which numerous small electrical appliances, and accessories are shown. The floor also has several "Crystal Studios" from which all radio events are broadcast.

Some 15,000 people visited the show on its opening day. The second day 32,000 went through the gates, and on the third day the latter figure was exceeded slightly. Between 30,000 and 40,000 are expected each of the remaining days. Admission is 25 cents per person.

Joseph Bernhart, manager, said the exposition is already a success, with practically all available exhibit space in use.

### Opening Luncheon

Activities began officially on Wednesday noon at a banquet in the Hotel Astor. Speakers were Grover A. Whalen, New York NRA director; Owen D. Young, chairman of the board of General Electric Co.; Floyd L. Carlisle, chairman of the board of the New York Edison Companies; and Merlin H. Aylesworth, president of the National Broadcasting Co.

That night Clarence E. Law, president of the Electrical Association of New York, used the newly discovered electronic cathode ray pen to write an opening message which was reproduced before the Madison Square Garden assemblage in facsimile letters of fire on a screen similar to those used in television reception. Simultaneously, Dr. O. H. Caldwell, former Federal Radio Commissioner, broadcast over the Columbia network, describing the first public demonstration of this latest electronic transmitter of messages.

Each day of the exposition is being

(Concluded on Page 4, Column 1)

## Bulletin

CLEVELAND, Sept. 26 (Special to Electric Refrigeration News)—G. M. Johnston, president of Universal Cooler Corp., was re-elected president of the Refrigeration Division of the National Electrical Manufacturers Association at the annual meeting of all divisions of the association today at the Hotel Cleveland here.

The 17 member companies of the Refrigeration Division will take final action at today's meeting on the proposed code of fair competition for the refrigeration industry. The meeting was well attended.

## Revised Retailing Code Released By NRA

WASHINGTON, D. C.—As the clamor by certain groups against general price fixing in the retailers' code grew last week, the NRA made public the revised code as submitted to Administrator Johnson in order to test public sentiment regarding it.

The Consumers Advisory Board, operating under the Recovery administration, has stepped in to fight the price control plan. It is an impractical formula to apply, board members claim, and will tend to give retailers an excuse to advance prices unnecessarily.

Advisers to the industrial board assert that the principle is economically unsound, that it will lead to kiting prices with an inevitable result that consumers will buy less, reducing sales, and completely destroying the aims of the NRA in increasing employment and purchasing power.

The price control provisions of the revised code would prohibit sales of merchandise at less than 10 per cent above the wholesale cost. These provisions are as follows:

"In order to check predatory price cutting and minimize retail operating losses resulting therefrom, and in order to assure that the retailer shall be at least partially compensated for the service he renders the consumer, on and after the effective date of this code no retailer shall offer for sale, sell, exchange, or give away any merchandise, except as provided in Section 16, Column 2)

## Williams Directs RMA Engineers

CHICAGO—LeRoy J. Williams, vice president and general manager of the Grigsby-Grunow Co., Chicago, and a director of the Radio Manufacturers Association, has been made chairman of the association's engineering committee.

Mr. Williams will direct all engineering activities of the RMA. He succeeds George K. Throckmorton of Harrison, N. J., who resigned as chairman because of the pressure of other work.

## BREWING MACHINERY EXPOSITION OPENED

By Phil B. Redeker

CHICAGO, Sept. 25.—The Second American Exposition of Brewing Machinery opened today in the Coliseum with an array of exhibits that will probably stamp it as the leading exposition of manufacturing and retailing equipment for a single industry to be held in this country during 1933.

The show, which will last until Oct. 1, is the second of its kind to be held in the United States, the last previous brewing equipment exposition having been held 22 years ago. The current show ties in with meetings of the American Brewers Association and the Master Brewers Association which are being held this week in Chicago.

Draft beer cooling and dispensing equipment exhibits have a place amidst the gigantic and complex brewing, pasteurizing, refrigerating, conveying, and barrel washing equipment. Modern beer retailing fixtures were getting the greatest share of attention from retailers, beer distributors, and the local press.

A beer garden has been set up in conjunction with the show but in contrast to another "beer exposition" held not long ago the beer garden element has been "played down" and there is no pretentious vaudeville show to distract the visitor's attention from the exhibit.

Erected in the beer garden for the benefit of thirsty visitors and exhibitors is a 100-ft. Liquid Carbonic bar fitted with Liquid-Zahn beer-drawing equipment. Thirty brands of beer are on tap at this bar, a variety of beers said never to have been available before at one bar.

In the main exhibition hall are many other bars, ranging from the compact two-spigot models for household use to the massive 20 draft arm type with beveled mirrors and metal trim.

Old-timers in the brewing industry declare that the modern dispensing equipment is very different from that used in pre-prohibition days. Even the old brass rails are gone, bartenders having found that since the taproom has become a rendezvous for both sexes, women patrons have wrenched

(Concluded on Page 16, Column 1)

## ALOHA OE



Ray Lynch (right), president of Post-Lester Co., Providence Kelvinator distributor, presents "Jud" Sayre, who resigned as Kelvinator sales manager, with a Cadillac V-12 in behalf of the distributing organization. In the foreground of the picture are, left to right, Raymond Rosen, Philadelphia distributor; Mrs. Sayre; Mr. Sayre; George Mason, president of Kelvinator; Les Wiswell, Chicago distributor; and Mr. Lynch.

## BANKS TALKS ON REFRIGERATION AT GAS MEETING

### International Phases Of Industry Are Discussed

By George F. Taubeneck

CHICAGO, Sept. 27.—Revealing the state of mind of gas utilities concerning refrigeration and their attitude toward electrical competition, and outlining in considerable detail the methods employed on the Pacific Coast to sell gas refrigeration, F. M. Banks, general superintendent of sales for the Southern California Gas Co. today presented a wealth of information to the fifteenth annual convention of the American Gas Association, which is in session at the Stevens hotel here this week.

This morning at an early breakfast, home service directors of gas utilities, led by Ruth Kleinmaier of the Central Hudson Gas & Electric Corp., held a round table discussion of methods of promoting gas refrigeration and cooking. Dealer contacts, cookery classes for salesmen, traveling kitchens, and theatre tie-ups were presented as the most effective new home service promotional ideas.

Kitchen modernization was also the subject of yesterday afternoon's session of the commercial section of the association.

Inasmuch as the International Gas Conference is being held here simultaneously with the A. G. A. convention, the meeting has had a distinct foreign flavor. Speakers from England, France, Switzerland, and Canada were on yesterday's program.

The Los Angeles utility executive's presentation of problems of refrigeration promotion, however, was easily one of the outstanding events of the entire convention thus far.

"Through the past few years it has been a considerable problem to conceive of, and to acquire a profitable market of any size for gas refrigeration," began Mr. Banks.

"The relatively high cost of water was an ever present deterrent, particularly in the hands of competitors who used it in their competitive arguments."

"In many cases warm water supplies in the summer season further exaggerated the water problem, and the supply was sometimes not free from foreign matter, all of which has constituted a considerable obstacle."

"In addition, the servicing problem, whether normally or abnormally

(Continued on Page 6, Column 1)

## BRIGGS ENGINEERS DESIGN SPECIAL FOOD CHAMBER

DETROIT—Engineers of the Briggs Mfg. Co. here are this week completing design work on a supplementary food compartment for electric refrigerators which the company will offer to household refrigerator manufacturers for use in their own cabinets.

Idea for the compartment was first conceived by members of the refrigeration department of Bruno-New York, Inc., Gibson distributor in New York City, and was developed to some extent at the distributorship under direction of H. A. Glasser, manager of the firm's refrigeration division.

Arrangement was then made with Briggs for that company to make necessary refinements and handle merchandising of the product.

As developed by the New York company, the compartment was a part of the refrigerator door, which could be opened by pulling out the hinged back of the door after the latter was opened.

Now, the compartment forms no part of the refrigerator door itself, but is located just inside the door, and is as large as the food compartment opening. It is several inches deep, made of stainless steel, and is designed for storage of fruit, eggs, bottles, condiments, etc.

This compartment may be swung out, as if it were a second door in the refrigerator, to give access to the main part of the food storage compartment. In the back of the supplementary compartment may or may not be louvers for cooling purposes—depending upon the desires of refriger-

(Concluded on Page 16, Column 2)



## BY GEORGE F. TAUBENECK ---

### Free Cadillac V-12 For Jud Sayre

"Hello, dear. Yes, I think I'll be getting home fairly early this afternoon. Sure, I'll fill the Dodge with gas so it will be all set. Goodbye."

Thus spake JUD SAYRE, erstwhile Kelvinator sales manager, into the telephone last Wednesday noon. And then he walked out for lunch. There, out in front of the Kelvinator plant was a long, black sedan. It appeared so huge to Jud that he half expected a couple of boatswains to throw out a gangplank when it drew up to the curb.

Equipped with every gadget and widget known to the automobile trade, this Cadillac V-12 would have made a millionaire fidget to edge it into his budget. What it cost (we happen to have heard) would sound like a darned nice year's salary to a great many sales managers in this here industry.

Well, sir, Jud didn't fill the Dodge with gas that afternoon and drive it home. He didn't get home, in fact, until rather late that night. But when he did, he drove the Cadillac V-12! It was his!! His distributors had given it to him!!!

In all our born days we've never heard of anything like it. We have seen executives presented with valuable gifts before (although never anything to compare with Jud's beautifully appointed motor car), but in practically every case these executives were planning on many more years with that company.

Jud is leaving Kelvinator, you know, to take entire charge of Montgomery Ward's appliance division. He will do the buying and merchandising. He will do the engineering and designing. In other words, he will be The Works.

The Cadillac came to him as a fare-

### Jud on the Job



This is probably the last picture taken of Jud Sayre as a Kelvinator man. The editor snapped it inside the Kelvinator exhibit at A Century of Progress as Jud was presenting his sales story.

well gift from the distributors he had been working with for several years.

That night at the Book-Cadillac there was a banquet for him. First there was some good, if mild, punch. Then came an indifferent dinner, with chicken which wasn't just indifferent, but downright delicious. (Don't blame Kelvinator for that, blame the Book).

The dinner was unhappy. Moreover, nobody was kicking up any heels or shouting any hallelujahs about Jud's leaving. Indeed, everybody felt sad. That was a bad start for an evening of music-making, merriment, and mirth, wasn't it? Yet the evening was just that. It was one of the best times we've had since GEOFF JOHNSTON m. c.'d so humorously at the history-making all-industry banquet in Detroit early in August, for which F. M. COCKRELL was host.

To begin with, GEORGE DENT, Bay City (Mich.) distributor, has a sweet tenor voice. He sang. Then BILL DeWITT, southeastern district manager, is a charming and soothing toastmaster, whose fund of delightful stories is that of the typical southern gentleman.

CAMPBELL WOOD, director of utilities sales, can be very funny when he wants to be. So can ROE KEMP and CAL MITCHELL, district managers. Kemp exhibited a chart showing the "century of progress" which led up to the Montgomery Ward catalog (that catalog, by the way, was the indispensable peg on which most of the jokes were hung).

Mitchell, who is leading all the district sales managers in the volume of sales, presented Jud with goofy gifts purportedly from E. G. BIECHLER, TED QUINN, and BILL GRUNOW.

WILLARD FRENCH, president of

### Grounded at Nela Park



GEORGE CHAPMAN and P. B. ZIMMERMAN, who run the G-E specialty appliance dept., have lunch at the G-E Kitchen Institute in Cleveland with Col. ROSCOE TURNER (right) who was selected a fortnight ago by the American Speed Foundation as the outstanding flyer of 1933. Recently he won the Bendix Trophy by flying from New York to Los Angeles in 11 hours and 30 minutes and on Sept. 25, he set a new West-East record of 10 hours and 5½ minutes. He has had a G-E refrigerator in his home for four years, and is a close friend of Walter Daily, sales promotion manager.

the advertising agency which handles the Kelvinator account, debunked the whole proceeding neatly and with dispatch. Treasurer HOWARD LEWIS burlesqued one of his own financial reports. H. G. PERKINS presented Jud with a check for \$100,000, on which all he had to do was to get Howard Lewis's signature. It was all good sport and high caricature.

There were also scads of good friends around to liven the evening: JOHN GARCEAU, keen sales promotion man, Engineer JOHN WYLLIE, Ad-man E. L. TRIFFIT, Publicity Man TED CHRYST, and others almost without end.

Top moment of the occasion for us, however, was provided by RAY LYNCH, Providence, R. I., distributor. Mr. Lynch, inspired by thoughts of Jud and the Montgomery Ward catalog, recited one of JAMES WHITCOMB RILEY'S unpublished lyric odes, "The Passing of the Backhouse." It's one of our prime favorites.

The levity was abated by JIM JOHNSON, Jud's assistant, who presented him with a watch paid for by contributions from every Kelvinator office worker; and serious moments were provided by GORDON EVANS of the manufacturing department, Vice President HENRY BURRITT, and President GEORGE MASON.

### Free Towels for 95 Homemakers

Dropped into the J. L. Hudson department store in Detroit the other day to see J. B. OGDEN, who is generally conceded to be one of the most able and successful department store appliance merchandisers in the entire nation.

There were about a dozen people ahead of us, so we poked around the refrigerators for awhile until a woman, mistaking us for a salesman, asked to see the sunlamps.

Not being able to find a salesman at the moment (they were all occupied with refrigerator prospects), we proceeded to take the liberty of selling her a sunlamp ourselves. Finally found someone to take the money and arrange delivery.

Shortly afterward we heard an excellent salesman adroitly steer a woman away from the trade-in idea. She was dissatisfied with the drab appearance of her older electric refrigerator, pondered awhile in front of a Grunow cabinet, finally decided upon a super-series Frigidaire as having the most style, and ordered it without further ado. The salesman convinced her that it should be relatively easy for her to sell her old box through a want-ad in the newspapers.

Just as we turned to eavesdrop on another refrigerator salesman (demonstrating a Leonard), Mrs. MEEK, distinguished-looking home service director for Hudson's entered with no less than 95 (actual count) homemakers in tow.

She had been lecturing upstairs to 650 women. From these she got 95 to fill out prospect questionnaire cards and come downstairs to a demonstration of an Apex electric ironer. Each woman had a chance to iron a kitchen towel for herself, after which she received the towel as a gift.

When Mr. Ogden finally came out, all smiles, we were really a bit sorry. Glad as we were to see him and much as we wanted to talk to him, we hated to leave the fun. There's a department store which really understands the merchandising of appli-

ances, and it was genuine pleasure to watch the wheels go 'round.

### Norge in the Movies

GEOFF JOHNSTON, well-liked chairman of the refrigeration division of the National Electrical Manufacturers Association, and highly successful president of the Universal Cooler Corp. of the United States and Canada, likes to rib us about our proclivity for movie people.

Fact is, we don't see a movie a month, on the average. But ever since we took the trip on WALTER DAILY'S "Forty-Second Street Special" and covered it in detail on this page, Mr. Johnson has accused us of running a movie magazine.

Very well. Since we have the reputation, we might as well live up to it. Here's some movie news:

Monogram Pictures will soon release a college-life extravaganza, "The Sweetheart of Sigma Chi," starring MARY CARLISLE. Mary, you may remember, shared honors with BING CROSBY in "College Humor." A Norge refrigerator also plays a role in that picture.

Photographs of Mary and the Norge, as well as postcards and window posters of the same, have been prepared by JIM STERLING and his sales promotion manager, MARY BLACKFORD and SALLY STARR, also featured in that film, have been photographed with a Norge. There's a 26x40 poster in four colors, too, "The Sweetheart of the Kitchen."

When "The Sweetheart of Sigma Chi" reaches town, Norge dealers will display these pictures in their stores and in the theatres showing the picture; they will arrange theatre lobby Norge displays; and they probably will stage contests (guessing kilowatt hour consumption, number of revolutions of the Marathon Rollator, and the like) with the prizes given at the theatre during the showing.

### Gossip

Now, Mr. Johnston, how do you like that? Want more? O. K. Here's some gossip:

(1) AZALEE CECIL, who was on that General Electric-Warner Bros. special train, almost broke up the taking of a picture the other day when she began a feud with NANCY LYONS, the "other girl" mentioned when ANN HARDING divorced HARRY BANNISTER.

(2) JEAN HARLOW crossed up the editor of ELECTRIC REFRIGERATION NEWS by getting married last week. Two days after this sudden event, the Sept. 20 issue of the News came out, and on the back page of the rotogravure section was a picture of JACK CAMPBELL captioned, "Jean Harlow's latest boyfriend."

To make matters complete, on the very day that paper came off the press, the aforementioned Mr. Campbell married NELL NELSON, Chicago torch singer.

And that will be all for today.

### Help for Commercial Salesmen

Have you looked over the September issue of REFRIGERATED FOOD NEWS carefully? We're quite proud of it, and if it doesn't help about 367 salesmen of commercial refrigeration equipment land at least four extra orders apiece, we're going to be disappointed.

Take the story about Kroger modernizing its Akron, Ohio, stores, for instance. Listen to this quotation:

"Kroger officials feel that they are on safe ground in specifying new re-

frigeration equipment as a sales getting device, for their past records show that installation of such equipment brings an average increase in business of approximately 100 per cent."

Isn't that a honey of a statement to show a prospect?

From Tarrytown, N. Y., comes an item about Abe Roskin, who installed new refrigerating equipment in his White Front market. We quote from REFRIGERATED FOOD NEWS:

"A short time before he installed the equipment he was thinking of letting a butcher go. Two months after he had installed the equipment he not only had to retain the meat cutter he planned to fire, but was forced to hire an extra butcher and a cashier."

His business had doubled within two months after he had remodeled his store and installed new refrigerator equipment."

And this from Cleveland:

"Installation of modern refrigeration equipment has helped George Brooks, proprietor of Brooks' market at Euclid and E. 75th St., to enjoy one of the few profitable summers he has experienced in the meat business."

From Detroit:

"A great reduction in losses resulting from spoilage and shrinkage, a lower power bill, and a more attractive display of his meats are the benefits realized through the installation of new refrigerated display case equipment in his market located in the heart of the Harper Ave. automobile factory district, according to Henry Orlowski."

From Dayton, Ohio:

"We can serve 100 gallons of beer an hour and the temperature will not vary a degree due to the electric refrigeration equipment," says H. F. Stevens, manager of the Van Cleve hotel here, in commenting upon the mechanically refrigerated beer-cooling equipment recently installed in that hotel."

And let us quote some of the headlines:

'LARGEST DAIRY RETAILER'  
USES MODERN COOLING

STORE RENOVATION  
BOOMS BUSINESS  
FOR RETAILER

UNITS PLACED IN WINDOW  
ATTRACT NEW BUSINESS

NEW EQUIPMENT HELPS  
BUTCHER OBTAIN  
'BLUE EAGLE'

NEW CASES REDUCE  
OPERATING EXPENSES  
BUTCHER DISCOVERS

SUMMER TRADE BOOSTED  
BY NEW DISPLAY CASES

Retailer Finds Equipment Installed for 'Show' Purposes Is Returning a Profit

Read also the swell testimonial for mechanical refrigeration from Philip Eisentate, Philadelphia food retailer, in that issue.

Writing to REFRIGERATED FOOD NEWS, Mr. Eisentate declares:

"My meat business is at last profitable, because I have cut my refrigeration cost from \$30 a month to \$3 a month with electric refrigeration. My new display case has brought me an increase of about 65 per cent in the sale of delicatessen items."

"About nine months ago I purchased an 8-ft. double-duty display case, with a ½-hp. Frigidaire unit.

"For a number of years I had used ice refrigeration equipment consisting of a large cooler and a 10-ft. display case. For the past two years my ice bill averaged from \$25 to \$30 a month. The equipment was very unsatisfactory, and I lost a number of customers because of spoiled meats."

"After I installed the new refrigeration equipment I found to my amazement that my electric bills were only \$3 a month more than before the installation. Therefore my refrigeration cost has decreased from \$30 to \$3 a month. I also save a considerable bit of money each week on trimmings and loss from shrinkage."

"Up to date (nine months after installation) I have had no service costs. Temperature control is automatic, and I have no worries about my refrigeration."

"I am thoroughly pleased with my electrical refrigeration equipment. It is clean and attractive. Many customers have commented on my displays. Many also say that the meats taste better and seem fresher."

In addition to these testimonial stories, which should be plenty to commercial refrigeration salesmen, there are important articles on ice cream cabinet operation, refrigerated truck insulation, beer cooling, egg storage, and NRA codes for the food and refrigeration industries—to say nothing about news of new refrigeration equipment for the field.

All this service for just a dollar a year! Can you beat it?

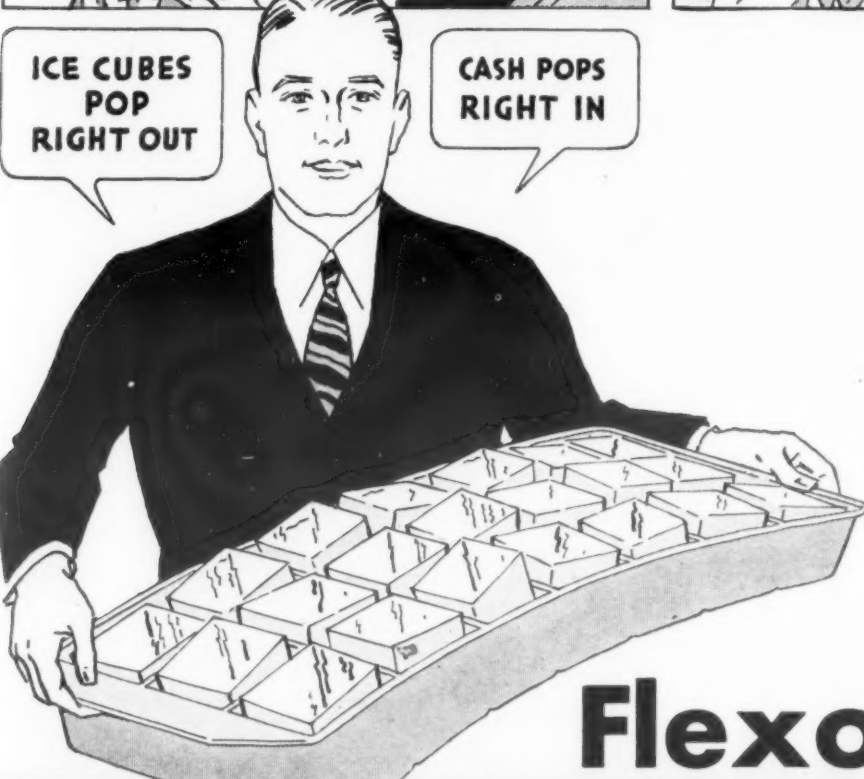
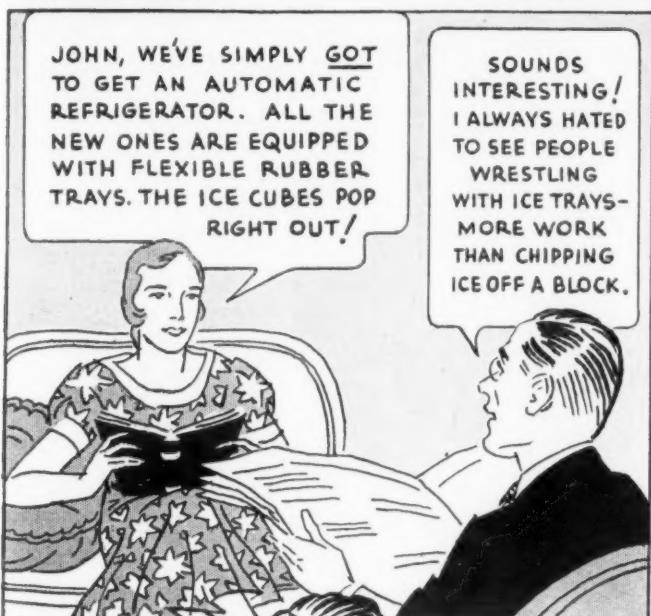
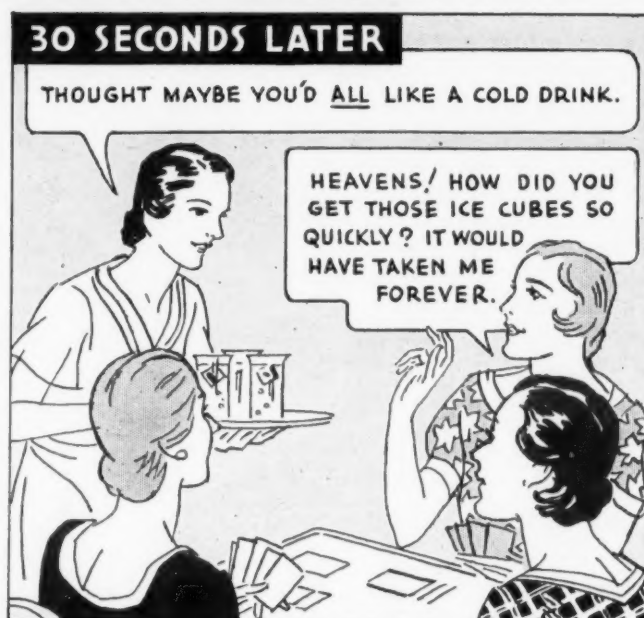
### 'Wal, Looka Thar Oncet, Jim!'



From the "Days of '49 Camp" at A Century of Progress exposition came Mayor Don Hall, Jim Tree, and Mrs. Hall to marvel at the Westinghouse model electric kitchen at the Fair.



# BRIDGE GAME NETS REFRIGERATOR SALE



## Let Flexible Rubber Trays do a Lot of "FREE" Selling for You

NO REFRIGERATOR IS REALLY MODERN UNLESS IT'S EQUIPPED WITH THEM

They had to be good to get where they are. And Flexible Rubber Trays and Grids really have arrived—to the tune of 2,000,000 sold in three short years. That's proof that America has accepted them with open arms.

In fact, the demand for Flexible Rubber Trays and Grids has grown to such an amazing extent that they're now used as standard equipment by all leading refrigerator manufacturers.

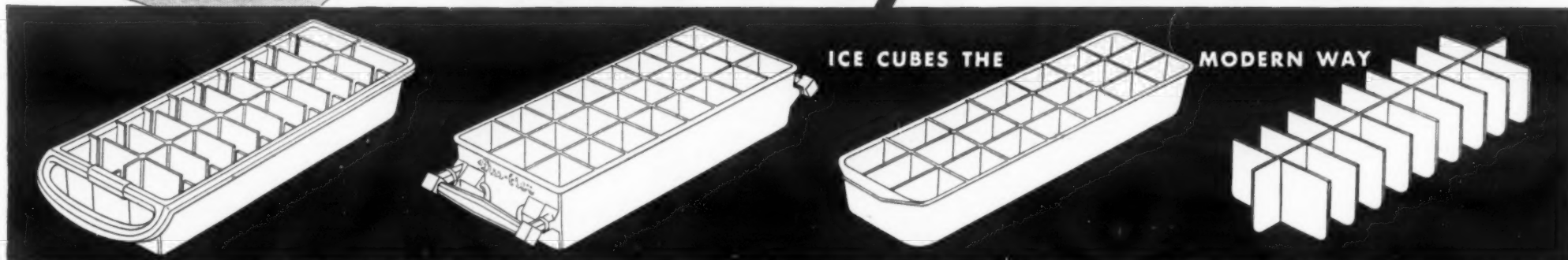
The refrigerator you sell may be up-to-the-minute in every other respect, but if it doesn't offer the ice cube convenience of Flexible Rubber Trays or Grids you can't call it really modern. And that means it's harder to sell.

Thousands of dealers and salesmen have found that these time and trouble savers are real money-makers. Many a refrigerator sale has been clinched because of them.

So insist that Flexible Rubber Trays and Grids be included as standard equipment in all the refrigerators you sell. You can get full details of their money-making possibilities from the manufacturer of your refrigerator—or by writing direct to us.

Stock Flexible Rubber Trays and Grids now. Start collecting the extra profits they're bringing to so many other smart operators. The Inland Manufacturing Company, Dayton, Ohio.

## Flexo Trays • Flexo Grids



### Quickube tray

The Quickube Tray is made exclusively for Frigidaire. It releases ice cubes instantly—one at a time or a whole trayful—with just a slight pressure at the bottom of the tray.

### Duflex tray

The Duflex Tray, made only for General Electric, combines flexibility with rigidity by means of stainless steel reinforcing bars. Cubes are instantly removed at a finger touch.

### Flexo tray

The Flexo Tray shown here is a flexible rubber tray, used as standard equipment by Kelvinator, Leonard, Sparks-Withington, Mayflower, Williams, Apex, and many others.

### Flexo grid

This newest Inland invention combines fast freezing with easy removal of ice cubes. Flexo grids are now standard equipment on Frigidaire, General Electric and Westinghouse.



## 15 Refrigerator Manufacturers Exhibit At New York Show; 1933-34 Radio Models are Displayed

(Concluded from Page 1, Column 2) devoted to some special phase of developments or applications of electricity or radio. The schedule follows:

Wednesday, Sept. 20—NRA Blue Eagle Day.

Thursday, Sept. 21—Electrical Science Day.

Friday, Sept. 22—Army and Navy Day.

Saturday, Sept. 23—Lighting Day.

Sunday, Sept. 24—Broadcasting Day.

Monday, Sept. 25—American Electric Home Day.

Tuesday, Sept. 26—Ironer, Washer, and Cleaner Day.

Wednesday, Sept. 27—Police Day.

Thursday, Sept. 28—Refrigeration Day.

Friday, Sept. 29—Oil Heating and Air-Conditioning Day.

Saturday, Sept. 30—Radio Day.

On "Electrical Science Day," Dr. Caldwell, chairman of the day's program, lectured on the various new scientific wonders on exhibit. Some of the devices he explained were:

The electric pen, electric tongue and eye, the smallest radio transmitter in the world (developed by the U. S. Army Signal Corps), the clavilux or color organ, the static machine which shoots 60,000 volts through the human body without injury, the voice-controlled automobile, the voice-controlled electric light, robots or electrical men, the oscillograph which measures and records the pitch of the human voice in light waves, etc.

One of the features of the day was the electronic piano, invented by Benjamin F. Meissner, which can be made

to play like an organ, clavichord, harp, horn, and other instruments from a conventional piano keyboard.

Friday, "Army Day," was featured by a talk broadcast over WAEC, by Col. James B. Allison of the Signal Corp in which he explained the Army's contributions to electrical advancements.

Signal Corp's officers demonstrated their radio and aviation instruments, and in the evening a battery of large searchlights were directed across the sky in an attempt to locate a fleet of planes. Music during the day was supplied by two Army bands.

### RADIO EXHIBITS

Radios and refrigerators are exhibited most prominently among the numerous electrical products on display. Although radios far outnumber refrigerators, the eye-catching character of the glistening white refrigerator gives a visitor the impression that they are about equally represented. Radio manufacturers have taken the opportunity offered by the show to present all their 1933-34 lines, hence new radio models are legion.

Most noteworthy change in many of the new radios is the addition of some utilitarian feature other than radio reception. Thus some of the console models have side compartments for use as bookcases, other are built as endtables, and some have drawers. Several radio and phonograph combinations are in evidence.

Designers of the new radios have attempted to make them real articles of

furniture, and have frequently abandoned the ornate kurly-kews of former models in favor of plain modernistic lines.

That radio prices are definitely going up is evident from price tags on the new models. This is significant perhaps, when it is recalled that the last radio show in Chicago threw quite a scare into the industry by revealing a host of \$20 midget sets.

Even the midgets of the new models range above \$30, some ranging up to \$60. Better loud speakers, improved efficiency, and more pleasing appearance have been incorporated in the new and higher-priced midgets.

One new application of radios was demonstrated in the United American Bosch booth when an Indian motorcycle was equipped with a new Bosch motorcycle radio, designed especially for motorcycle policemen.

Television exhibits are conspicuously absent.

Air-conditioning equipment is shown by Frigidaire, General Electric, and Westinghouse, and the heating and humidifying types by makers of oil burners such as Gar Wood, Perfection Stove Co., etc. Gar Wood, incidentally, has Miss America X on the exposition floor.

### REFRIGERATION EXHIBITS

A brief description of each refrigeration exhibit follows in alphabetical order:

#### Apex

Displayed by the New York factory branch of Apex Rotarex Corp., which sells direct to local Apex dealers, were six washing machines, three ironing machines (one operated by a lady demonstrator), one 6-cu. ft. Apex de luxe refrigerator, and several vacuum cleaners.

A new model in the Apex line is a vacuum cleaner featured by a headlight, a foot pedal to adjust the height of the cleaner, a two-speed motor (the

slow speed for expensive rugs), and a swivel handle with which the cleaner can be steered by twisting the wrist. L. A. Dexter, branch manager, is in charge of the exhibit.

#### Crosley

In the Crosley exhibit, in charge of Grant Layng, sales manager of the dealer division of the Crosley Distributing Corp. of New York, were electric refrigerators, beer coolers, and radios.

Refrigerator doors stood open to show passersby the Shelvador feature. The beer coolers are furnished in two models, both self-contained. The Kool-rite bottle beer cooler has the compressor below and a bottle compartment with top-opening doors above. The Kool-draft refrigerates a beer keg in a lower compartment, serving through draft arms above, in front of the compressor chamber.

Main feature of the new Crosley radios being introduced at the show is a new auditorium-type dynamic loud speaker in largest models, and available as a separate piece of equipment for smaller models, Mr. Layng explains.

The new Crosley midgets are now provided with a rear jack so that a user can plug in a better loud speaker than the small one inside the midget cabinet.

#### Frigidaire

A full line of Frigidaire household refrigerators and several of the commercial refrigeration products were shown in the exhibit managed by the Frigidaire Sales Corp. of New York, a factory branch.

The display included two commercial condensing units, one a 3-hp. size, the other Frigidaire's new 10-ton, 4-cylinder machine for air conditioning. Air-conditioning equipment also embraced the large store-cooling unit, square overhead room coolers, and floor-type air conditioners.

Prominent in the exhibit were a draft beer cooler for two half barrels, and a bottle beer cooler. The latter may be used either as dry bottle storage, full immersion in water, or partial immersion (water up to the level of labels on the bottles).

#### General Electric

Four separate displays are maintained at the exposition by General Electric. Household refrigerators, the all-electric kitchen, washers, ironers, fans, etc. are shown by Rex Cole, Inc., New York distributor, on the arena floor, with E. L. Walters, exhibit manager in charge.

Adjoining is the exhibit of General Electric Supply Corp. and the Royal Eastern Electric Supply Co., featuring G-E radios, the Hotpoint electric refrigerator, washing machines, sun lamps, vacuum cleaners, sewing machines, clocks, etc.

On the exposition floor below are shown the products of General Electric's air-conditioning department—the G-E oil-burning furnace, humidifier, overhead room coolers, commercial condensing units, and floor-type room coolers of both remote and self-contained design.

A second Rex Cole project is the commercial display on the exposition floor, under the supervision of Joseph E. Osterholm. Here are a 100-in. display case, 45- and 60-cu. ft. commercial refrigerators, 2- and 3-tap beer dispensers, a 2-hp. compressor, and G-E's new model BB-1 bottle water cooler with a refrigerated bottle compartment.

#### Gibson

Finished just in time for the show, a new Gibson water cooler made its first public appearance here last week. Labeled model GP8-3, it is a pressure-type cooler with capacity to cool 67 gallons of water per 24 hours. The cooler is finished in jet black, and has a Gibson compressor installed in the bottom.

Gibson is operating two exhibits at the show, both under the direction of W. R. Marshall, advertising manager of the Gibson Electric Refrigerator Corp. The main exhibit is on the arena floor and displays four Gibson de luxe household refrigerators, two standard models, a Gibson bottle beer cooler, and the "little aristocrat," a low black porcelain refrigerator mounted on rubber-tired casters.

The second Gibson display, on the lower level, is an attention-getting "shadow box" in which visitors see alternating images of an old Gibson ice box and a new Gibson electric.

Assisting Mr. Marshall with the exhibits are Herbert E. Young, eastern district manager; E. J. McCarthy, western district manager; H. W. Yeager of Baltimore; and representatives of Bruno-New York, Inc., local distributor.

#### Graybar

Four Graybar Ilg-Kold electric refrigerators, ranging in capacity from 4.5 to 8.5 cu. ft. are on display in Graybar Electric's booth. The company also has a cut-away of the Ilg compressor. Electric clocks and Colonial radios, for which Graybar is the exclusive distributor, complete the exhibit.

#### Grunow

General Household Utilities' exhibit on the main floor features the new line of 10 Grunow radios, introduced two weeks ago in Chicago, as well as

its de luxe and Progress lines of electric refrigerators.

Three of the de luxe models are finished in combinations of seafoam green and yellow.

Demonstrating the operation of Grunow's low-pressure Carrene refrigerating system is a panel board with temperature and pressure gauges hooked up to a working model of the system.

Downstairs is a unique stunt of showing small movies on a screen in the center of a refrigerator door. The film intersperses Grunow sales points in a movie of winter sports at the Olympic games.

The Grunow delegation includes W. C. Grunow, president; H. C. Bonfig, sales manager; Mr. Dyer, special sales representative; F. M. Edwards, radio engineer; J. J. Davin, sales promotion manager; and J. F. Vultor of the sales department.

#### Kelvinator

Household refrigerators and oil burners are displayed in the Kelvinator exhibit. Eight refrigerators are shown, ranging from the small R-42 to the large D-230.

Refrigeration display is handled by E. A. Wildermuth Co., Brooklyn distributor, while demonstration and explanation of the oil burner are carried on by representatives of the Kelvinator factory branch in Long Island City.

#### Leonard

E. B. Latham & Co., Leonard distributor here, has an extensive exhibit of Leonard electric refrigerators, Thor washing machines, Zenith radios, and Silex glass coffee makers—from which samples are served.

The refrigeration exhibit includes six models, in Duco and porcelain finishes, from 4 to 9.5 cu. ft. in size, and a Leonard water cooler. One feature of exhibit is a 40-year-old "Leonard Cleanable" ice box.

#### Majestic

Grigsby-Grunow's complete line of 1933-34 radios, and both standard and electro-sealed Majestic refrigerators are shown in Majestic's space. Mounted on a demonstration stand is a Majestic electro-sealed compressor with a glass dome showing its working parts.

Manufacture of Columbia phonograph records is visualized on a demonstration board showing samples of crude rubber and the various steps up to the stamping of discs for the finished record.

Earl Hadley, Grigsby-Grunow advertising manager, and A. A. Trostler, field representative, are attending from the factory. Edward Rutledge is in charge of the exhibit, assisted by men from Majestic New York.

#### Mohawk

Seven Mohawk electric refrigerators and two washing machines made by the Wurlitzer Mfg. Co. are displayed in the booth of the May Radio & Television Corp., New York distributor.

The company is also showing Proctor irons, toasters, waffle irons, and L. & H. electric ranges.

#### Norge

B. & O. Radio, Inc., Norge distributor from Newark, N. J., exhibits 11 electric refrigerators, a Norge beer cooler, and the Norge Economaid washing machine. Refrigerators range from the 4.4-cu. ft. model of the standard line to an 11-cu. ft. two-door model of the de luxe line.

Operation of the Norge Rollator compressor is demonstrated with a sectional model, hand-turned and protected by celluloid.

#### Sparton

A revolving turntable in the center of Sparks-Withington's display space shows exposition visitors two Sparton electric refrigerators and several of Sparton's newly introduced radios. Styled cabinets mark the new Sparton radio line.

In charge of the Sparton exhibit are Guy Core, advertising manager, and E. T. H. Hutchinson, radio sales manager.

#### Stewart-Warner

Featuring the dual purpose idea of making radios serve also as useful furniture, the new Stewart-Warner radios are built as table models, bookcase models, and French commodes.

All are exhibited at the show, as are Stewart-Warner home motion picture cameras and projectors, and five refrigerators ranging from 4 to 8 cu. ft. in capacity. The display is managed by the Wholesale Radio Equipment Co., distributor.

#### Westinghouse

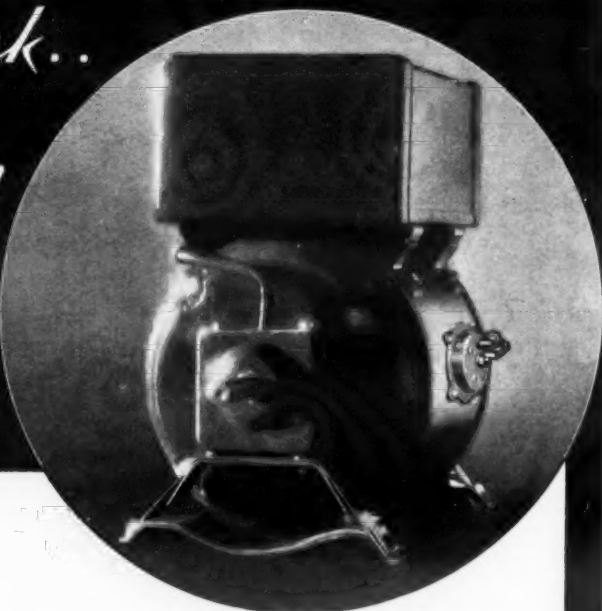
In the joint exhibit of the Westinghouse Electric & Mfg. Co., Times Appliance Co., and Allen-Ingraham, refrigeration distributor, are shown Westinghouse household refrigerators, water coolers, air conditioners, commercial refrigerating machines, irons, toasters, food mixers, percolators, fans, and the Marr oil burner which is sold by the Westinghouse Electric & Supply Corp.

Drawing considerable attention of visitors was the new Westinghouse self-contained floor-type air conditioner with a water-cooled refrigerating machine operating in the base. The display also includes a Westinghouse-refrigerated Fischman draft beer cooler.

## AN ANSWER FOR YOUR REFRIGERATOR

PROSPECTS *who ask...*

*How much Juice?*



EVERY refrigerator dealer knows the factors that affect electric power costs . . . food content in the box, room temperature, varying power rates, amount of time the door is open, box insulation, and so on. Obviously you cannot give definite figures in answer to the question "How much juice does it use?"

But if your line is equipped with the Westinghouse Refrigerator Motor . . . then you can truthfully promise your prospects *maximum motor efficiency.*

This motor is specially designed for use in refrigerators. No making over of some other model . . . no guessing. Electrically and mechanically, it is built to give absolutely lowest-cost operation, year after year, under the most severe conditions in which a refrigerator motor is required to operate.

No need to be vague about your guarantee of motor *performance* either. Because of its resilient mounting, and because no end-play noises develop, it is silent in operation . . . so silent you must listen closely to know when it is running. When Thermoguard protection is specified, it is guarded by the exclusive Westinghouse built-in thermostat . . . an almost human watchman that automatically shuts off the motor when abnormal conditions threaten its safety; starts it again when the danger is past. Simple design and a special oiling system contribute to making this motor most economical to operate.

If you are handling electric refrigerators equipped with this motor, you can answer questions about power consumption with positive promise of "more cold, more ice cubes, and more general refrigerating efficiency per kilowatt hour."

**Westinghouse**  
Refrigerator Motors 

### SEND FOR BOOKLET

Westinghouse Electric & Manufacturing Company  
Room 219—E. Springfield Works, Springfield, Mass.

Gentlemen: Send complete, detailed information on the Westinghouse Motor, especially designed for electric refrigerators.

Name .....

Position .....

Company ..... T 79743

Address ..... ERN 9-27-33



*"What a*  
**BEAUTIFUL**  
**WHITE**  
**REFRIGERATOR!"**

*(she was looking at the FINISH)*

**Another sale started by the  
 eye-appeal of the super-white  
 whiteness of du Pont  
 DULUX Finish**

**THIS NEW TYPE FINISH FOR REFRIGERATORS ASSURES LASTING WHITENESS, TOO—AND RESISTANCE TO CHIPPING AND FLAKING. WHAT A STORY FOR SALESMEN WHO WANT TO SELL MORE REFRIGERATORS!**

WHAT DOES a woman see first in your refrigerators? The finish? Right. The size and shape take form in her eye gradually. But it's the finish that strikes her eye at once—that makes the first strong sales appeal.

In du Pont DULUX you have a finish with a tremendous eye-appeal. Your customer sees in DULUX Finish a more beautiful white than she has ever cast eyes upon. A pure, glowing white, full of life. A super-white that reminds her of the whiteness of freshly fallen snow—of snow-clad mountain peaks. Here is no pale, anemic white finish, but one with a texture, depth and gloss new to her.

"What a beautiful white refrigerator!" she says. She means—"What a marvelous white finish on the refrigerator." Then you drive home the point—"Yes, Madame, and *that* finish stays white. Severe tests have proved its resistance to yellowing."

There's a sale half made. There's a promise of scores of other sales of refrigerators with a du Pont DULUX Finish.

#### NO MORE CHIPPING OR FLAKING

The story of the development of DULUX Finish for Refrigerators is one of the most interesting in chemical history. It is a record of another achievement of du Pont chemists who literally labored for years to produce a beautiful finish—but also one with the hardness of an inorganic finish such as porcelain, and the toughness, flexibility and adhesion obtainable only in an organic finish. They succeeded in developing DULUX. They tested it in the laboratory . . . exposed it to the weather . . . pre-tested it in actual service before offering it to refrigerator manufacturers.

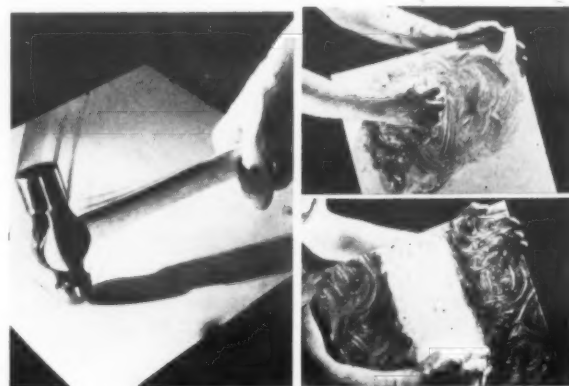
They smote DULUX finish with a hammer. It did not chip or flake! They tortured it with grease and soap and water and weather exposure for 13 months in the unusually severe Florida climate. It proved its resistance to moisture, to household oils, greases, acids and abrasives . . . its ability to protect against corrosion.

No wonder you can think of DULUX as the outstanding development of all time in organic refrigerator finishes.

Leading manufacturers of electric refrigerators are specifying du Pont DULUX for their latest models. The speed and economy of application make its use practical even on more popularly priced models.

#### BOOKLET TELLS WHOLE STORY!

Read more about this new finish in a booklet, "DULUX for Refrigerators." This *tells* of the unique advantages of Dulux in more detail and shows why it makes selling easier. All you have to do is ask for the booklet. It is free. Address your inquiry to E. I. du Pont de Nemours & Co., Inc., Finishes Division, Wilmington, Delaware.



**Meeting the hammer test!** DULUX has the toughness of ivory, but is so flexible that even hammer blows do not harm it. What chance then have the more gentle knocks it will receive in the home?

**It stayed white.** DULUX Finish on an actual refrigerator was wiped with grease every morning for 13 months . . . washed off with soap and water every evening for 13 months. Its original beauty lasted.



**DULUX**  
REG. U. S. PAT. OFF.

*for refrigerators*



## Banks Explains Utility's Promotion Of Electrolux Sales

(Continued from Page 1, Column 5)

caused, in a widely scattered territory, has been an expensive one.

"As a further hindrance, in one city, an old ordinance prohibiting the use of water for cooling refrigeration machinery without employment of cooling towers, was invoked against the domestic gas refrigerator. This has been overcome, but only comparatively recently.

Neither did apartment house usage receive acceptance upon any reasonable scale, Mr. Banks continued. No ordinance restricted multiple "hook up" of electrical systems.

Furthermore, the city of Los Angeles requires that the water connection from refrigerator to sewer waste line be a broken connection to prevent a possibility of reversal of flow contaminating the water supply. This increases the expense of installation, is unsightly and often results in stoppage from algae growth.

### Objections Overcome

"With the advent of the air-cooled unit the outlook has been most materially changed," Mr. Banks declared. "Gone is the greatest single argument of the competitors of gas refrigeration. Gone is the expensive installation. The servicing cost has materially decreased, while the amount of gas used annually by a refrigerator has decreased only slightly. Hence the natural gas utility now has some margin for direct profit from the volume of gas sold for refrigeration.

"Previously, if a refrigerator used twelve thousand cubic feet per annum at a price of 75 cents a thousand, the gross revenue from a refrigerator was \$8.40. If the added cost arising from servicing refrigerators in such a

scattered territory was between five and six dollars the load was far from interesting in the aggregate.

"Now, however, with the air-cooled refrigerator using gas at the rate of 10.5 thousand cubic feet per annum, let us say, the gross return is still \$7.35, which is seven-eighths of the former gross.

### Augments Gross Spread

"Meanwhile if servicing costs can be reduced in the neighborhood of 50 per cent the gross spread resultant from the refrigeration load will be augmented by 50 to 75 per cent.

"With the spread between gross income and out of pocket servicing costs so materially improved, and with many of the deterrents to acquiring a fair volume removed, it has been much easier to demonstrate to utility management the value of a more thorough promotional program," the speaker said.

"Of course," he went on, "even under former conditions, natural gas utilities which are operating under circumstances similar to those which I have described above have not been unmindful of less direct and doubtless even more far-reaching benefits accruing from the promotion of gas refrigeration.

### Natural Gas Field

"Many have held the opinion that some natural gas utilities have been short sighted in not giving due weight to the value of the refrigerator as a factor for appealing to the public mind—either to engender a greater degree of appreciation for the gas industry as a modern industry, or more directly, in not using the refrigerator's low operating cost as an opening

wedge to maintain or obtain the cooking load.

"Such is not the case. In fact, such relatively indirect benefits have been the principle, if not the sale motive for any effort in support and development of a refrigeration market.

"Appropriations of money for any purpose have required ample justification in recent months, and particularly under these circumstances it has not always been an easy task to develop a thorough-going program of promotion, while there were many who questioned the tangible results which would be obtained.

### Inaugurate New Program

"With the air-cooled unit a reality the utilities in Southern California were able to put new programs into operation, as did utilities generally throughout the country.

"Acting in capacity of distributors, the Southern California Gas Co. and the Southern Counties Gas Co. arranged to double the retail dealers outlets in and near the Los Angeles area. This activity, which has been carried on for two years by one of the companies in Los Angeles, enfranchised dealers as agencies.

"Each retailer, in many cases merchant plumbers, is required to purchase at least one refrigerator for display, and whenever possible, to have it in operation.

### Financing Paper

"Display purchases may be made on terms or for cash, at a maximum discount. If a dealer wishes to finance a sale himself he may purchase the refrigerator for cash, 10 days at the same maximum discount.

"However, since the majority of sales for such equipment are not made as cash sales, the more normal procedure is that a dealer contracts with a customer on one of the assignment contract forms supplied by the utility. When the sale is made the contract is accepted for assignment by the utility, after the usual credit inspection.

"Maintenance of identical terms, prices and interest rates is thus assured throughout the district. Upon such sales the dealer earns a discount slightly smaller than for a sale which he finances himself.

"Occasionally a dealer may, for any one of several reasons, find it impossible or difficult to close a sale himself. If he so desires he may report the prospect, and if the sale is closed by a utility salesman, he is paid a commission which is considerably smaller than the term sale discount, but is still sufficient to be worthwhile.

"Some variations of the plan have been made, particularly in smaller communities, in order to prevent serious competition between utility salesmen and dealer salesmen.

"In order to conduct dealer activities effectively, refrigeration specialists have been assigned to this wholesaling business. These men establish the retailers initially, and are responsible for seeing that their displays are set up and maintained and operating.

### Water Heater Problem

"It has become an unfortunate practice among distributors of some gas appliances to do most of the contact and selling work for their dealers. I have in mind the case of some water heater distributors who sell through merchant plumbers as their dealers, largely because the average customer calls a plumber when a water heater begins to leak or is otherwise unserviceable.

"Since the majority of water heater business in Southern California consists of replacing old automatic storage gas water heaters, one may see the reason for establishing plumbers, as dealers generally.

"However, since there are a number of water heater companies in the field, each anxious for a share of the business as large as he can obtain, the matter of competition among distributors for the best dealers, or for the other fellow's dealers soon became serious.

### Purpose of Sales Lost

"It was not long before dealers were importuned to discontinue one line and take on another, led to do so by some added inducement as to discount or perhaps by the offer of repair business on all heaters of that make in a specified area.

"In any event, after a few changes, some of the dealers became aware of the fact that they needed to do a little work in the field. The current distributor, so desirous of continuing him as a dealer, would turn over sales which the distributor's men had made.

"This was supposed to indicate the facility with which that particular water heater could be sold, or to demonstrate the public demand for it. Of course its effect was not entirely beneficial, because some of the dealers came to feel that it was their right to expect the distributor to sell the equipment and turn over the sale to him.

### Distributor's Salesmen Used

"I have known of cases in which the dealer made no effort whatsoever to sell a water heater. Instead, upon receipt of a trouble call, he merely ascertained the condition of the heater, and if it appeared that a new one was needed or might be sold, he at once called the distributor to have him send a salesman to that address to make the sale.

"One might suppose that the distributors would tire of such work, but such was not the case, for a simpler reason. As business became worse, it was increasingly important that he be apprised of water heaters no longer serviceable.

"He winked at the action of his dealers, and paid the discounts as a consideration for notice of the old heater being worn out. Of course I do not mean to imply by any means that all water heater dealers worked in that manner, but I do mean that the habit had become far too common for good promotional results.

### Assist in Difficult Sales

"If we were to employ those same outlets as refrigeration dealers it was important that we be able to capitalize upon the sales ability of such men. In consequence, the utility policy has been not to become 'closers' for dealers as a general rule.

"Men assigned to that work do assist their dealers in the start, and will always assist on particularly difficult sales, but they do not spend much time with the dealer who expects his business on a plat.

"Of course, since there is no other gas refrigerator available in the area, and since the plumbers do not yet handle any volume of electric refrigerators, they have a more logical incentive to become sellers if they are to profit.

"For those who cannot accomplish the actual selling work there is a provision under the plan to compensate adequately for that amount of service which they can perform."

### Sales Training Work

In order to be of assistance in sales training, according to Mr. Banks, several series of night refrigeration meetings have been held for dealers. In these meetings such subjects are treated as:

- (a) Facts about refrigeration.
- (b) Facts about gas refrigeration.
- (c) Sales methods.
- (d) Installation and operation.

During a series, sales material is provided and its use demonstrated. For the purpose of insuring good installation and satisfactory operation, standard installation diagrams are provided for the dealers to follow.

"It is interesting to note," Mr. Banks reported, "that on the average the work done by the dealers has been quite up to standard, as evidenced by the reports of the inspection which is made of each installation by the distribution department of the utility before the sale is considered closed and the account commissionable.

"Naturally we have some dealers who have expected to have refrigeration business walk in the door. For them the business has been a disappointment. But others have gone into the field themselves, and have placed sales forces in the field as they have seldom done for other equipment.

"It appears unquestioned that refrigeration selling has opened the way to a greater degree of field selling of other gas appliances in a way that nothing else has done before. Some of our refrigerator dealers have undertaken field selling of furnaces, particularly of floor furnaces, to replace less adequate gas equipment.

### New Meetings Conducted

"As more dealers have been established, or as it has been necessary to change dealers, new series of meetings have been conducted. In the case of dealers who maintain a number of inside salesmen as well as field salesmen it has been found advantageous to conduct meetings for them on their premises.

"It is quite gratifying to see 125 to 150 dealer men turn out at night for a series of meetings, and to put into practice what they have learned."

As a further step in air-cooled refrigerator promotion, Mr. Banks related, one company has placed a refrigerator specialist in each division outside of the city of Los Angeles. These men are responsible for dealer sales as well as for sales made by utility salesmen. Their compensation is increased by the same amount whether a sale is made by dealer or by utility salesman. Such specialists operate under the supervision of the division sales managers, who are usually compensated by straight salary or salary and small commission bonus.

### Utility Issues Bulletins

As a follow-up of all meetings, the utility issues regular bulletins to dealers. By working arrangement with one of the gas utilities which does not sell merchandise, several of the refrigerator dealers maintain displays on the floors of the branch offices of that company.

"As a further aid, that utility has developed a very active employee-lead system for the assistance of the refrigeration dealers operating in its territory.

"This year dealers sales have increased 650 per cent in that territory," stated Mr. Banks.

"So widespread has the demand for gas refrigeration become that we have requests for dealer franchise from a number of the larger department stores, music stores, and other potential outlets.

"Such marked increase in dealer activity has, of course, been immediately beneficial in the increased sale of refrigerators, but it has also been a splendid aid in the normal dealer contact efforts of the utilities.

### Sell Other Appliances

"Except in very small communities, it has not been the practice of these utilities to act as distributors of appliances other than refrigerators. The reason, obviously, is that such activity would tend to offset the efforts of the regularly established trade channels; whereas, in the case of gas refrigeration, there is not a great number of manufacturers, each of whose interests need be considered.

"The interest which the gas refrigerator has created in the minds of such dealers has opened their eyes to the possibility of selling more of the other gas appliances. The result in a number of instances has been that dealers have taken on other lines of gas equipment, or have stocked better and more complete lines.

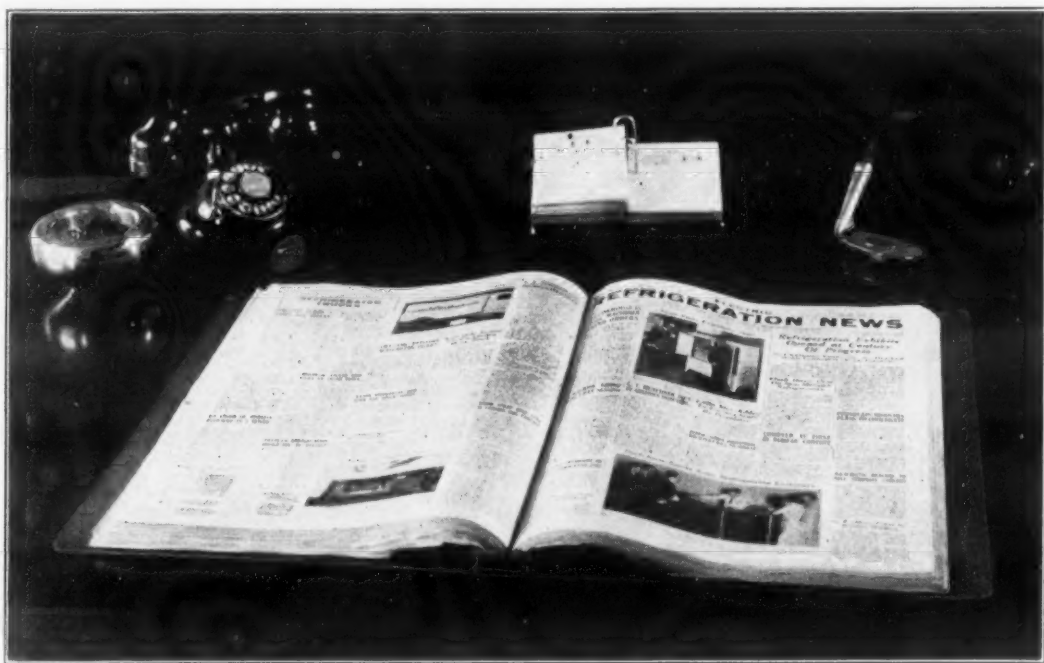
"Best of all is the fact that they have renewed interest in selling gas equipment, and in talking gas. The activity has been the opening wedge in establishing adequate relations with some retailers who have hitherto been most antagonistic toward all utilities.

### Apartment House Sales

"Since the sale of refrigeration for apartment houses is a phase of the business which has not gotten under way with the same drive as has the domestic activity, and since such sales are necessarily quoted at less than retail prices, that business has been reserved largely to the utilities.

"It has been arranged for dealers to participate in 'flat' business at some discount, but their participation in regular apartment business has been limited to the receipt of a small commission for active leads turned over

(Concluded on Page 7, Column 1)



## Here is the Binder You Have Been Wanting - -

Here is a binder designed and made especially for keeping your file copies of Electric Refrigeration News neat and always available for ready reference.

It is made with stiff board covers, attractively bound in good quality of black imitation leather. The name Electric Refrigeration News is stamped in gold on the front cover and backbone.

The price is \$3.75 shipped to you post paid. Send your remittance with order. May we send you one?

## Electric Refrigeration News

550 Maccabees Bldg., Detroit, Mich.



## PROMOTION OF GAS REFRIGERATOR SALES OUTLINED BY BANKS

(Concluded from Page 6, Column 5)

is made only upon the first actual sale made for each building so reported. "The elimination of water connections has made it possible to quote in competition with 'multiple hook up' electric installations in the better class of buildings, but first cost remains an outstanding obstacle to acquisition of a very desirable volume of business in the majority of average type apartment buildings.

"Such work is being cared for by the architect and apartment division of the utility. Here, as in case of the domestic installation, the gas refrigerator is playing an excellent part in forestalling the installation of electric ranges and of small electric heaters. Such competition has become increasingly severe with the approaching prospect of service of Boulder Dam power in Southern California.

"Even though 1100 BTU natural gas is being served at comparatively low rates, the years of advertising by the electric fraternity has had its results.

### Good Promotion Needed

"Free wiring, which is being offered by some of the local municipal electric organizations, and advertising which has little, if any regard for truth, and no regard for ethics, is producing results which call for the best promotional efforts of the gas utilities.

"In this connection the gas refrigerator has again served a most convenient end. It has lent itself to advertising and publicity in a manner which has been duplicated by no other appliance. "It has been possible to obtain publicity from circus stunts which could hardly have been possible with anything less new, and although lacking perhaps in the dignity which some of us feel necessary, such stunts did provide a means of telling about something new."

### Advertising Plan

As a part of the local advertising plan, Mr. Banks revealed, the Southern California Gas Co. placed 1,000 column inches devoted to refrigeration in the Los Angeles dailies during May and June. Approximately 13,000 column inches were placed in 92 papers in outlying districts during the same period.

Throughout the season the Southern Counties Gas Co. placed approximately 12,000 column inches in 70 newspapers in its serving area.

At the same time, a joint advertising activity of the same two utilities, in conjunction with the Los Angeles Gas and Electric Corp., which company does not sell either gas or electric appliances, was responsible for over 1,100 inches additional in the Los Angeles dailies.

In addition to this advertising, which was devoted exclusively to refrigeration, tie-in mention has been made in other advertising of these companies during that time.

Twelve full page refrigeration advertisements were placed in four California magazines, some by the utilities directly, and some through the agency of the Pacific Coast Gas Association Cooperative Advertising Committee.

### Cooking School Publicity

Such space has been augmented from time to time by publicity in connection with newspaper cooking schools, in which gas refrigeration has had a part. In a few cases refrigerators have been given as door prizes at theaters.

The three utilities have also conducted a joint outdoor display series, consisting of 403 24-sheet posters in Los Angeles and vicinity during May and June, and 66 in July.

In addition, the Southern Counties Gas Co. devoted to refrigeration its permanent display boards at strategic locations in its territory, while the Southern California Gas Co. made use of 60 24-sheet posters in its outlying districts.

As an adjunct of the foregoing publicity and advertising, proofs of all advertising were distributed to all gas appliance dealers in advance of insertion. A dealer and utility truck card plan was also put into effect as a corollary of the poster display campaign.

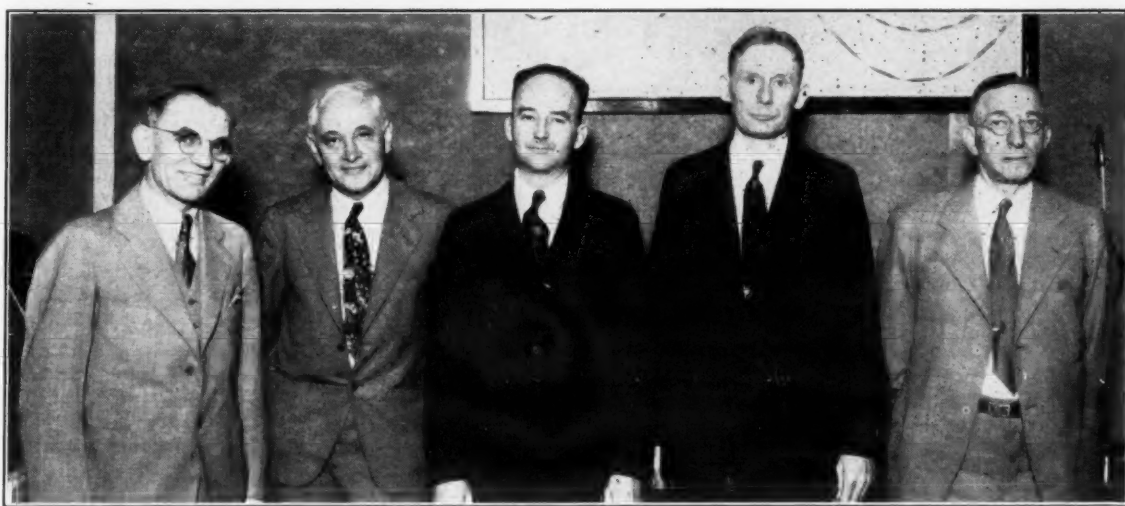
### Truck Cards

The utilities supplied steel slide frames for trucks to all dealers who desired them; and in some cases supplied distributors and manufacturers, who in turn supplied their dealers. The plan provides for six changes a year of the car card size displays, which are copies of the outdoor displays, in season.

Provision is made that dealers who handle only refrigerators will have six changes a year, and likewise with ranges or water heaters or heating equipment. A further effect of continuity has been added by providing a monthly window card service to dealers, the cards being similar to the truck cards.

The utilities made use of bill en-

## 128 Years of Refrigeration Experience



A record of 128 years selling one line of refrigeration equipment is claimed by this group of five men. Meeting at the main office of the Baker Ice Machine Co., Inc., they are, left to right, F. E. Hartmann, sales manager, Omaha, 29 years; J. M. Mackenzie, Los Angeles, 29 years; J. D. Higgins, Fort Worth, 22 years; E. H. Burge, president of the Burge Ice Machine Co., Chicago, 26 years; and A. S. Krantz, Burge sales manager, 22 years.

velope inserts, also. Approximately a million especially prepared, colored inserts were sent out during the early part of the refrigeration season; and liberal use has been made of material supplied by Electrolux.

"With this activity on the part of the utilities," Mr. Banks continued, "it has of course been possible to interest refrigerator dealers to advertise on their own accord. At the present time approximately one-half of the dealers are advertising regularly in their district newspapers.

"Several of them have made use of outdoor display boards, and a few have used neon signs to distinct advantage. While the utilities have had no radio program this year, some of the larger refrigerator dealers have made good use of the radio for the promotion of gas refrigeration.

"Of course systematic window displays have been used by the companies throughout their serving areas to give added attraction to the gas refrigerator. The cumulative effect has been reasonably effective.

"The public is beginning to hear something about gas refrigeration, and what is still more important, it is hearing and thinking a little more about gas.

"The fact that it has been possible to get heretofore uninterested retailers to spend money to advertise gas appliances, far beyond their usual habit, is itself of present and future benefit to the gas industry locally.

### Field Selling

"Of equal, or possibly greater value, is the fact that gas appliance retailers have begun to learn the value, (in fact, the fundamental necessity) for field selling. Field solicitation in any manner which gives results is desirable from the standpoint of the gas industry. "A few dealers have gone in to the business in an organized and efficient way. One, in particular, uses a telephone book arranged by street addresses, and calls all homes within any desirable district by 'phone. If he learns that the home is not equipped with mechanical refrigeration, he plans to expend his first efforts there.

He circularizes the list thus gained, following up with a letter stating that a man will call on a specified day. Salesmen are required to follow up the time planned.

"Two of these dealers will continue their operations this winter with gas heating equipment, not forgetting refrigerators when they can sell them. Another dealer has plans under way for handling furnaces, ranges and refrigerators, throughout the year.

### Mainstay of Gas Promotion

"In the final analysis," Mr. Banks concluded, "the gas refrigerator has been the mainstay of gas promotion during a most trying period. It has also made possible the current essential drive for the all gas kitchen and real kitchen modernization.

"The recent improvement of the gas refrigerator has been most timely. It is gratifying, as well as a hopeful indication of renewed vigor in the industry, to see the efforts which are being made by the association to interest member utilities in the potential benefits which an adequate refrigeration program can provide.

"It may not be expecting too much to hope for a unity of effort in this work which can overshadow any similar action of our industry within recent years."

## New Jersey Leagues to Meet Oct. 12

NEWARK—Annual conference of the New Jersey Council of Electrical Leagues will be held Oct. 12 at the Newark Athletic club. Principal subject for discussion will be the effects of the National Recovery Act upon league members. Date of the conference will coincide with that of the Newark Electrical Show.

## Two Utilities to Sell Electrolux

EVANSVILLE, Ind. — Just franchised to merchandise Electrolux gas refrigerators are two midwestern utility companies which sell both gas and electricity. They are the United Light, Power & Engineering Co. of Davenport, Ia., and the Middle West Utilities Co., of Chicago.

Former company controls 45 properties in Iowa, Nebraska, Tennessee, and Indiana, all of which will handle Electrolux.

## MILK STORAGE CONTEST HELD IN SPOKANE

SPOKANE, Wash.—Tull & Gibbs Co., Kelvinator distributor here, recently sponsored a contest in which entrants were asked to guess how long a refrigerator in the window would keep 32 pints of milk sweet.

Winner was awarded an R-42 model for her guess, which came closest to the 22 days, 23 hours, and 45 minutes the milk was kept sweet, according to L. K. Vallandigham, manager of the refrigeration department.

## NORGE REPORTS 337 SMALL TOWN SALES

DETROIT—Sales reports received by Norge officials here last week showed that Norge refrigerator dealers in eight small towns have sold a total of 337 units since the beginning of 1933. The dealers' towns and their respective Norge sales are as follows:

King George Courthouse, Va., population 200, 16 sales; Farmville, Va., population 600, 27 sales; Chase City, Va., population 300, 19 sales; Readville, Va., population 100, 16 sales; Glade-water, Tex., population 6,000, 111 sales; Caughdency, N. Y., population 206, 81 sales; Kaw City, Okla., population 1,001, 17 sales; Independence, Ia., population 3,672, 50 sales.

## Norge Offers \$12,500 In Sales Prizes

DETROIT—Checks totaling \$12,500 will be mailed early in October to members of the Viking and Norsemen clubs, Norge Corp.'s honorary organizations for star performers in its sales organization, as bonuses for their September sales. In August \$8,500 was distributed among members of these organizations for their sales during that month.

## Wetmore-Scott Seeks Name for Bulletin

BOSTON—Wetmore-Scott Co., Inc., Westinghouse distributor here, is issuing a new monthly house organ for distribution among all members of its dealer-salesman organization. A cash prize is being offered for the best name suggested for the publication.

# The SHELVADOR

U.S. Patent 1,898,922

The merchandising hit of the times. No invention, since the first ice box was produced has ever met so enthusiastic a reception. Housewives the country over clamor for it!



... only the NEW CROSELY Electric REFRIGERATOR has it!

WOMEN see it—want it—buy it! That's the history of the new Crosley SHELVADOR Electric Refrigerator. And because of this, Crosley production has grown and grown until today Crosley is far up among the big names in electric refrigeration. Crosley has done in refrigeration what Crosley has done in radio—established a quality-value-price leadership so real and substantial that business flows naturally to Crosley dealers. The way to profit is to have something that competition cannot have... you have that something in SHELVADOR.

... far more than any other refrigerator of equal size. Beautiful. Smart. Quality throughout.

And the price! That's the surprising thing! The price is far lower than other refrigerators of equivalent quality. And they cannot use the SHELVADOR!

See your Crosley distributor. Study every feature. Note the quality. Let the prices speak for themselves. Examine the SHELVADOR. Then you will understand why those who push the new Crosley SHELVADOR Electric Refrigerator sweep all competition before them.

\$89<sup>50</sup>

Delivered, Installed, One Year's Free Service

### Model D-45

(Not Illustrated)

4½ cu. ft. NET capacity; 10.6 sq. ft. shelf space (N. E. M. A. rating). Three ice trays, each with capacity of 21 cubes; 63 cubes in all. Additional space for extra single or double depth tray. 3" insulation at top, sides, bottom and in door. Dimensions: 56½" high, 23½" wide, 24" deep.

\$99<sup>50</sup>

### Model D-60

(Not Illustrated)

6 cu. ft. NET capacity; 11.5 sq. ft. shelf space (N. E. M. A. rating). Has three standard size ice trays, each with capacity of 21 ice cubes; 63 cubes in all, and one double depth tray for freezing desserts. 3½" insulation at top, sides, bottom and in door. Dimensions: 57½" high, 25½" wide, 24" deep.

\$130<sup>00</sup>

### Model D-35

(Illustrated Above)

3½ cu. ft. NET capacity; 8 sq. ft. shelf space (N. E. M. A. rating). Has two ice trays, each with capacity of 21 ice cubes—42 cubes in all. Additional space for extra single or double depth tray. 3" insulation at top, sides, bottom and in door. Dimensions: 50½" high, 23½" wide, 24" deep.

Remember the inside of Shelvador is recessed to provide for the shelves. The exterior of the door is bulged outward, improving the appearance of the refrigerator and providing space for even more insulation than in ordinary doors.

Montana, Wyoming, Colorado, New Mexico and west, prices slightly higher  
The Crosley Radio Corporation - - Cincinnati  
(Pioneer Manufacturers of Radio Receiving Sets)  
POWEL CROSELY, Jr., President. Home of "The Nation's Station"—WLW

ALL PRICES INCLUDE DELIVERY..INSTALLATION..ONE YEAR FREE SERVICE

CROSELY SHELVADOR Electric REFRIGERATOR



## ELECTRIC REFRIGERATION NEWS

Registered U. S. Patent Office

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of the IndustryWritten to Be  
Read on Arrival

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### EDITORIAL AIMS

To encourage the development of the art.  
To promote ethical practices in the business.  
To foster friendly relations throughout the industry.  
To provide a clearing house for new methods and ideas.  
To broadcast the technical, commercial, and personal news of the field.

VOL. 10, No. 4, SERIAL NO. 236, SEPT. 27, 1933

## Ford and the NRA

HENRY FORD is now complying with the NRA code for the automobile industry, although he has not signed on the dotted line and returned the coupon for a Blue Eagle. In fact, he's more than complying with the law: his basic wage rate is 50 cents an hour—well above the automobile code minimum rate—and his work-week is now 32 hours, as compared with 35 for the remainder of the auto industry.

This is big news to most of the nation. Some newspaper editors are frankly disappointed; they had hoped for a good fight to help sustain their front pages through the fall. Many small business men, independent operators, are chagrined, too; because in Henry Ford, they felt, they had a champion of the "rugged American individualist"—a champion big enough and canny enough to wage successful warfare against the corporations which now appear to be in the recovery saddle.

### Henry Turns the Tables

Detroiters, on the other hand, were not surprised at all; nor were others to whom the Sage of Dearborn is a fact and not a legend. They saw that a trap had been set for Henry, that certain groups apparently were trying to "make a sucker" out of the crafty industrialist. Right away they knew the answer to that. Henry is at his best when somebody is trying to put him in a hole. Sure enough it came: he hired 5,000 World War veterans, and gained nation-wide publicity thereby.

Following that, he put his plant and labor on a basis which went the NRA one better. And Detroiters expected that, too; for Ford was the first of the mighty industrialists to proclaim the theory that high wages for labor are necessary to promote prosperity—that a man should be paid for what he produces, and that if he can produce more with the aid of a machine, he should be paid more proportionately.

### High Wages an Original Ford Premise

When Ford inaugurated the five-dollar day and first expounded this theory, the rest of the business world was appalled. In time the doctrine became accepted and applauded, however, and at the beginning of the depression the great cry was that wages should be held up until the cost of living fell. That this condition really did obtain was one of the chief boasts of the Hoover administration.

In other words, the opponents of Roosevelt's plans for recovery do not have an ally in Henry Ford. Which means that they apparently have

nobody in their ranks now who can do much more than grumble.

Ford may not sign up for the Blue Eagle—he doesn't like to sign things. He isn't a joiner. Furthermore, his state, his city, and his bank were dealt crushing blows by the Roosevelt administration. It may be that he has chosen this means of signifying that he doesn't wish to take these slaps lying down. The principles upon which the NRA is based, however, have long been Ford principles. Naturally he can be expected to follow them.

Upon further reflection, it should be observed the entire New Deal—like the NRA—is not a concoction of untried theories propounded by a flock of callow college professors (there have even been university pros successfully in politics before—witness Woodrow Wilson, who was once president of Princeton, and Edouard Herriot, who was a professor of literature before becoming the perennial prime minister of France). Rather, it is an amalgamation of tested ideas which have been employed by many countries, many different political faiths, and many individuals.

### New Deal Not New at All

For instance, the idea behind the Farm Relief Act dates back to the agrarian doctrines of Tiberius Gracchus, who reigned over Rome more than a century before Christ. Legal regulation of hours of labor, collective bargaining, a form of voluntary dictatorship, managed currency, government limitation of competition in business—all these have been tried in various European countries long ago, as well as in recent times.

Both socialistic and capitalistic, the New Deal enlists the sympathies of the liberals and even the radicals, while retaining the good will and best wishes of the conservatives and reactionaries.

President Roosevelt has frequently been criticized (especially before his inauguration) for not having a definite program for "the long pull." But that, many observers believe, may be his salvation. He himself has stated that if an idea or a policy doesn't work, it will be abandoned forthwith; that he realizes much of the New Deal is purely experimental, and that a portion of it may not be feasible.

### Flexibility the Salvation of Roosevelt Program

It is in this flexibility that business men take hope. They may not agree with all his doctrines; but they know that they have at least worked elsewhere and at other times, and they are willing to give them a fling because they know Roosevelt will drop them quickly if they fail in their purpose.

Best of all, the Roosevelt smile and the Roosevelt action have restored confidence. To a nation which was perishing of inertia, the dizzy succession of changes and new projects which the Roosevelt administration has embarked upon came as a Messianic gesture. Moses is leading his people out of the wilderness of despair; they know not wither they goeth (nor, perhaps, does he!) but the fact that they are moving is the most welcome news they have heard since November, 1929.

### NRA Is Psychologically Sound

No doubt is there that the NRA movement will work some injustices, that it may be awkward and unwieldy and complex, and that it is utterly bewildering to vast numbers of business men. No doubt, too, that NRA publicity men have overplayed their hands in the matter of inciting war-time hysteria to help "put it over." No less a person than Owen D. Young has recently urged sanity and calmness. Yet the enthusiasm and the good cheer which the movement has engendered should have lasting effect.

All though the depression our leading industrialists were telling us that America was "fundamentally sound," and in a healthy and vigorous condition. They told us that the depression was largely psychological. After a year or so of these statements, many of us began to jeer. Recent events, however, seem to have proved them right.

Hearty cooperation with the NRA, confusing as it may seem now, appears to be the best available route to good times.

## LETTERS

### Is Our Face Red?

Frigidaire Corp.  
Dayton

Sept. 15, 1933.

Editor:

I notice that the industry can't help referring to electric refrigerators as Frigidaires. On page 15 of your current issue I see the item, "Columnist McIntyre Buys Frigidaire."

I imagine that despite the fact the story says Odd McIntyre bought a refrigerator of another make, your copy-writer just couldn't fathom anyone of importance buying anything but a genuine Frigidaire, and so put that in the headline.

JAMES W. IRWIN,  
Director of Publicity.E. H. Schaefer Corp.  
General Electric Distributor  
Milwaukee

Sept. 20, 1933.

Editor:

When I read the article on page 15 of your Sept. 13 issue concerning Columnist McIntyre's refrigerator purchase, I did not know whether to be amused or peeved.

I am wondering if this quality of discernment is standard in your publication. Taking all in all, this mess is the height of something or other—we will leave it to you to determine what.

E. V. OAKWOOD,  
Commercial Manager.Woodland Electric Co.  
Frigidaire Dealer  
Norristown, Pa.

Sept. 15, 1933.

Editor:

So what—"Columnist McIntyre Buys Frigidaire"—did he really buy?

I thought only laymen called G. E.'s and others Frigidaires.

FRED KILBURN.

Utah Power & Light Co.  
Provo, Utah

Sept. 20, 1933.

Editor:

"Columnist McIntyre Buys Frigidaire"—We suppose he asked for "one of those General Electric Frigidaires."

ED. HEIM.

Editor's Note: The McIntyre story, over which we are getting so much ribbing, appeared at the bottom of the next-to-last page of the Sept. 13 issue. It was a tiny item. We ask you: Is ELECTRIC REFRIGERATION NEWS read thoroughly?

### Asinine Letters

General Electric Co.  
Electric Refrigeration Dept.  
Cleveland

Sept. 22, 1933.

Editor:

Under "Letters" in the Sept. 6 issue, there is a letter signed by one Thos. E. Douglas, entitled "Can 16 College Professors Be Wrong?"

I wonder if it is necessary to print letters such as these, for if this is done it is possible that distributors, dealers and salesmen will fabricate asinine letters referring to competition which, in the long run, will be detrimental to all of us.

W. J. DAILY,  
Manager, sales promotion division.

### Approves Survey of Air Conditioning

Kelvinator Sales Corp.  
Detroit

Sept. 18, 1933.

Engineering Editor:

The writer is particularly interested in the recent article and tabulated survey of the air-conditioning installations in 1933 in the city of Detroit.

Information of this type is particularly valuable and interesting to air-conditioning manufacturers as it is representative of the type of equipment which is in demand by the air-conditioning customers. We would like to see surveys similar to this covering other large cities in the United States when and if such data is available.

C. L. TOONDER,  
Sales engineering dept.,  
Commercial sales division.

### Russ Not Moving to Grand Haven—Entirely

Bastian-Blessing Co.  
Chicago

Sept. 19, 1933.

Editor:

Much to our surprise, we read an extremely erroneous article in the last issue of the ELECTRIC REFRIGERATION NEWS, to the effect that we were closing the Russ Soda Fountain Co.'s plant at Cleveland and our plant at Chicago, moving all to Grand Haven.

We wish you would have this corrected in your next issue. The facts are that we are opening our Grand Haven

plant, which is fully equipped for wood and sheet metal work, and we are going to manufacture beer equipment, such as novelty boxes, coil boxes and bars.

We recently took over the Knight Soda Fountain Co. of Chicago and consolidated their offices with ours yesterday; will gradually move their soda fountain business to Grand Haven, also the woodworking department of the Russ Soda Fountain Co., Cleveland. That is all.

We have never had the slightest intention of moving this particular plant to Grand Haven, nor all of the Russ Soda Fountain Co.

It looks like Grand Haven was trying to get a little publicity but Mr. Oakes should never have given out a statement that was not correct. Therefore we trust that you will make the correction in your next issue, as requested.

L. G. BLESSING,  
President.

## WHAT OTHERS SAY

Reprinted from "Foreign Letters" (London Correspondent), The Journal of the American Medical Association, July 8, 1933.

In 1917 the food investigation board set a team of young men to work in the Cambridge University laboratories on the use of gas in the storage of fruit. The idea was that the control of the constituents of the atmosphere in which fruit is kept might prove as effective as the control of temperature in cold storage and so provide an alternative. The results of atmospheric control have now been published.

The apple was chosen as a convenient subject for experiment. It was soon found that apples keep much better in an atmosphere rich in carbon dioxide and poor in oxygen than similar fruit kept in air, but at ordinary temperatures an excess of carbon dioxide injured the fruit, causing patches known as brownheart.

The next step was to find the right proportion of the two gases. This is not easy, for while apples themselves are relied on to give off the carbon dioxide required for their own preservation, the more they give off the more quickly is the oxygen in the storage chamber spent and the balance between the two gases upset. To counteract the exhaustion of the oxygen in the atmosphere, controlled ventilation with fresh air was introduced, and another important discovery was made.

Up to this stage there had been no control of the temperatures of the atmosphere of the storage chambers, but various developments, of which the self heating of the stored apples was one, led to another major discovery—that the control of the temperature was as essential as the control of the gaseous composition of the atmosphere. It was ultimately found that for an apple very susceptible to injury from low temperature (Bramley's seedling) a mixture of 10 per cent of oxygen and 10 per cent of carbon dioxide at 40° F. gave better results than ordinary cold storage.

An immediate result was the construction of stores for the keeping of this apple, and a practical result is that ample supplies are now available at the beginning of May. Though gas storage is only in its infancy, market opinion favors it over cold storage as regards color, flavor and firmness. Moreover, it enables apples to remain fresh during the ordinary process of distribution and marketing.

The application of the principle to other fruits as well as to fish and meat is doubtless only a question of time. It remains for engineers to work out the practical application of this research work.

## Danish Firm Gets Large Order

COPENHAGEN, Denmark—Largest order for household refrigerators ever placed on the continent of Europe is estimated to be one secured by Thomas T. Sabroe Co., Danish manufacturer of automatic electric cooling equipment here, in August, according to Hans G. Rossing, refrigerating and electric engineer of this city.

The order was for installation of 500 household models in the new Maitegaards Avenier Strandvejen park apartment house here.

## FIVE 45-FT. REFRIGERATORS ORDERED BY ARMY

WASHINGTON, D. C. — Westinghouse Electric Supply Co. here has just received an order from the War Department for five 45-cu. ft. refrigerators equipped with full-length meat doors. They will be installed in station hospitals at the following army posts: Scott Field, Belleville, Ill.; Maxwell Field, Montgomery, Ala.; Hensley Field, Grand Prairie, Tex.; Fort Monmouth, Little Silver, N. J.; and Randolph Field, San Antonio, Tex.



## Westinghouse Manual Tells How to Answer Objections and Questions

MANSFIELD, Ohio—Westinghouse dealers the country over this week are passing out among their retail salesmen a little book which is No. 6 of the Westinghouse refrigerator salesmen's library, and has as its title "Know Your Stuff."

This manual differs in two respects from the average sales instruction book. It is concerned solely with meeting objections and answering questions. It discusses these objections and questions specifically—one at a time—and devotes but a single page to the general technique in this phase of selling.

### Two Cardinal 'Don'ts'

Over and above the ability to answer all objections and questions stand two cardinal "don'ts," says the book. Here they are: "Don't argue with a prospect. Don't knock a competitor."

Then comes a listing of 28 objections and prospect excuses, each followed by the answer which Westinghouse salesmen have found most effective during their selling experience. Objections listed are of two types: those concerning Westinghouse specifically, others concerning electric refrigeration in general.

### Location of Food Compartment

Typical of the first is No. 1 which reads, "The food compartment is too low." In part, the suggested answer is as follows:

"Westinghouse engineers and the home economist experts . . . thought you would prefer a cabinet with a hermetically sealed unit built in the top, eliminating the necessity of piping in the cabinet walls, which gives you better insulating efficiency, and which will allow the discharge of heat to rise from the top of the cabinet, thus keeping it away from the food compartment."

"From an economy standpoint, it is to your advantage to have the mechanism above the food compartment, from a convenience standpoint. . . to have the food compartment raised from the floor. So Westinghouse designers have compromised by not only putting the mechanism in the top. . . but raising the cabinet from the floor on broom-high legs."

### Refrigerant Used

Another objection listed is, "I don't want a dangerous gas in my refrigerator."

The answer suggested: ". . . One refrigerant works best with a certain type of unit, while another works best with a different type of unit. Each unit must be designed in accordance with the refrigerant used, and if it is so designed, the type of refrigerant makes little difference, providing it is correctly used."

"There are certain fundamental requirements, of course, which must be met, such as:

"1. Safety of the refrigerant, in quantities used and under the pressures used."

"2. Freedom from deterioration of the refrigerant or the oil when mixed together."

"3. Freedom from any tendency to corrode the metal parts with which it comes in contact."

"Sulphur dioxide, as used by Westinghouse, meets all these requirements. It is safe, because it is non-flammable, non-explosive. Furthermore, it has a pungent odor, so that any leaks would be instantly detected. Use of sulphur dioxide by Westinghouse has been approved by all the authorities responsible for the protection of life and property. . ."

Says the manual regarding the "not interested" excuse: "Many salesmen are successful in getting past this objection by merely laughing in a friendly manner and saying, 'Well, I thought everyone was interested in saving money this year.'"

"This comment, or one of this nature will do more towards meeting this situation than any remark which would lead to immediate and serious debate."

### Type of Compressor

"We prefer the rotary type compressor," is another objection.

Answer: "Mrs. Prospect, the rotary type compressor is very good. Westinghouse engineers experimented with this type of compressor for a long time before they finally decided in favor of the present hermetically sealed reciprocal type."

"In fact, even today Westinghouse controls many of the major patents covering rotary type compressors. Generally speaking, questions of this kind are fundamentally a matter of engineering judgment and with the experience. . . of Westinghouse engineers as a background, it seems entirely safe to rest secure in their judgment."

Here is the Westinghouse sales department's recommended answer for the objection, "We have always got along without it, and see no reason to change now":

"I can easily see your viewpoint. Our fathers and mothers used to think

they could get along without bathtubs, automobiles, radio, even an ice box, but today we have grown used to these conveniences and would find it hard to get along without any one of them."

"Without exception, we find that users of electric refrigeration say that they cannot understand how they ever got along without this type of refrigeration."

"The better food preservation, the convenience of freezing delicious desserts and ice cubes, the feeling of complete freedom in being able to go away any time and for any length of time without giving a thought to refrigeration, many other advantages, are really benefits that you should enjoy now."

## BIECHLER TELLS EFFECT OF NRA ON FALL SALES

DAYTON—Basing his message on the national recovery movement, Frigidaire Corp.'s President E. G. Biechler has issued a communication to every member of the company's sales organization, urging cooperation in the current Frigidaire autumn sales campaign.

Excerpts from Mr. Biechler's message follow:

"I like to think the salesman is the most important individual in the national recovery picture. And I really believe that he is. Without him and the jobs he creates for others through his salesmanship, this country could never forge ahead."

"All factors tend toward better business. . . Let us not overlook the fact that even in the worst days of the depression, a great part of the population of our country was employed steadily."

"These millions now are receiving pay increases and their morale has been lifted to the point where they are beginning to spend for things they have done without. Other millions now are on the payrolls for the first time in months. The burden of their support has been lifted from the shoulders of employed relatives and charity."

"Those who have been working and those who have been employed recently have a pent-up desire to buy. They want electric refrigerators. They want furniture and rugs and other comforts and conveniences for their homes. They want new cars. And they already are buying."

## STARS CONTEST BACKED BY ELECTROLUX DEALER

LOUISVILLE—Stratton & Terstegge, new Electrolux dealer here, recently cooperated with two local theaters in a "Know Your Stars" contest to introduce the Electrolux refrigerator and promote its sale in this territory.

A display of six Electrolux refrigerators was maintained in the lobby of the Rialto theater during the three weeks of the contest. Two refrigerators were exhibited in the lobby of the Strand.

Contest entry blanks featuring the dealer's name and Electrolux refrigeration were run daily in a local paper. Five times each day, screen announcements of the contest were shown in both theaters, with notice that a new Electrolux would be given to the person identifying the greatest number of cinema stars during the competition.

## Westinghouse Begins 'Mystery House'

MANSFIELD, Ohio—Work was started Sept. 19 on erection of the "House of Mystery" here, planned by engineers of Westinghouse Electric & Mfg. Co. to give the public a composite picture of that concern's contributions to the ease of home-making, and to serve as a testing laboratory for new developments in household electrification.

Surrounding the house is a high fence, and even the workmen have been asked to keep the home's plans and features a secret until it is opened in December, according to V. G. Vaughan, Westinghouse engineer in charge of the house's development.

## Universal Issues Mailing Piece

DETROIT—Just issued by the Universal Cooler Corp. here is a small mailing and handout piece advertising the company's line of household electric refrigerators.

Printed in black and silver, the folder contains pictures and key specifications of six models, a table of Universal's features, and an illustration and brief discussion of the condensing unit used in the company's domestic models.

## Cooling Off a Hot Number



Brunswick's new walk-in cooler is big enough to admit a six-foot man; so petite Dolores Gillen (Superior 5847, Chicago), NBC radio star, finds it is plenty roomy, thank you. The cooler, which is designed for pre-cooling beer, can be used with mechanical refrigeration.

## APPLIANCE DEPT. IS GIVEN BETTER SPOT

DETROIT—Kern's department store here—one of the largest in the city—has moved its electrical appliance department from one of the upper floors of its building to the company's Gratiot Ave. annex, where the department is located on the ground floor and has full use of large show windows.

The change was made as a part of Kern's plan to place increased effort on appliance sales and to make the appliance department one of the store's major divisions. Frank C. Elwood, formerly with People's Outfitting Co. and Crowley-Milner's department store here, has been employed as manager of the department.

To make larger stocks of appliances readily available, the store has given the department increased warehouse space. The department has also employed its own service man, according to Manager Elwood.

### Sales Increase 10 Times

Number of sales and prospects have increased approximately 10 times since the department was given a ground floor location and increased advertising support, the manager states.

Frigidaire, Gibson, Grunow, Copeland, and Norge refrigerators are in the Kern appliance division.

The change in appliance sales policies was made as an experiment by Kern's management, with the understanding that on Oct. 1 definite decision will be made—on the basis of business done in the department's new location—as to what support the appliance division shall be given in the future.

On that date, it may be decided to continue the department as it is at present, move it back into the main store, or discontinue it entirely, according to Mr. Elwood.

## IN WHICH WE REVIEW SOME OF OUR 1932 ADVERTISING

### "REGARDING LOW PRICES

There is one basic reason for being in business. That is to make money. Therefore we believe that low prices on commercial equipment such as ours are only justified when they permit us to maintain the quality of our product and at the same time yield a profit. Otherwise they are destructive to our industry and to ourselves—everyone's loss—nobody's gain."

Both Government and Industry have faced frankly the menace of the low price situation and today are making sound regulations accordingly.

**UNIVERSAL COOLER CORPORATION**  
DETROIT, MICHIGAN BRANTFORD, ONTARIO

MANUFACTURERS OF A COMPLETE LINE OF HOUSEHOLD AND COMMERCIAL REFRIGERATION EQUIPMENT



## Gas Industry Obtains Its Blue Eagle; Hour & Wage Substitutions Okayed

WASHINGTON, D. C.—The gas operating utility industry and the natural gas industry went under the blue eagle on Aug. 11 when the National Recovery Administration agreed to substitute the American Gas Association's proposed hour and wage regulations for those in the President's Reemployment agreement.

Any member of these industries may now secure the NRA insignia by signing the President's blanket code, writing above the signature this clause:

"To the extent of NRA consent, as announced, we have complied with the President's Agreement by complying with the substituted provisions of code submitted for the gas operating utility (or natural gas) industry."

Following are the hour and wage provisions approved by the NRA for the gas operating utility industry:

### PURPOSE

The declared purpose of this code is to effectuate the policy of Title I of the National Industrial Recovery Act during the period of emergency.

### DEFINITION

The American Gas Association affirms that it imposes no inequitable restrictions on its membership and participation in its activities, and it is truly representative as a national association of the Gas Industry of the United States.

The term "employer" as used herein includes every person, firm or corporation engaged as a public utility in producing, and/or transmitting or distributing manufactured and/or mixed gas.

### Labor Provisions

#### I.

**LABOR PROVISIONS**—As required by Section 7 (a) of Title I of the National Industrial Recovery Act, the following provisions are conditions of this code:

1. Employees shall have the right to organize and bargain collectively through representatives of their own choosing, and shall be free from the interference, restraint, or coercion of employers of labor, or their agents, in the designation of such representatives or in self-organization or in other concerted activities for the purpose of collective bargaining or other mutual aid or protection.

2. No employee and no one seeking employment shall be required as a condition of employment to join any company union or to refrain from joining, organizing or assisting a labor organization of his own choosing; and

3. Employers shall comply with the maximum hours of labor, minimum rates of pay, and other conditions of employment, approved or prescribed by the President.

#### II.

**CHILD LABOR**—After Aug. 31, 1933, no person under sixteen years of age shall be employed, except that persons between fourteen and sixteen years of age may be employed for not to exceed three hours a day and those hours between 7 a. m. and 7 p. m., in such work as will not interfere with hours of day school.

### 40-Hour Week

#### III.

**HOURS OF EMPLOYMENT AND WAGES**—The following paragraphs in this section III are in substitution for paragraphs 2 to 7, inclusive, of the President's Reemployment Agreement. (Substitution Approved Aug. 11, 1933, by National Recovery Administration.)

"(A) No employee shall work for more than average of 40 hours per week during any six weeks' period, except those specified in Paragraph (B).

"(B) Load dispatchers, emergency maintenance and repair employees, gas works production and gas distribution operators, their attendants, crews and helpers, if highly trained and not readily replaceable, whose duties must be continuously performed in order to render the public a safe and continuous service, may be employed not in excess of 48 hours per week so long as other competent employees are not readily available for such work, and in emergencies such employees may work more than 48 hours per week, but in no case shall the hours worked exceed an average of 48 hours for six consecutive weeks. All employers subject to this code shall proceed with the training of additional employees as rapidly as is consistent with the rendition of safe and continuous service, so that by March 1, 1934, as many employees as possible may be reclassified under the 40 hours per week limitation; and reports shall be made on said date of the extent of such reclassification to the National Recovery Administration.

### Exemptions Under Code

"(C) The maximum hours fixed in the foregoing paragraphs shall not apply where not more than two persons are employed in communities of less than 2,500 population, which communities are not part of a larger trade area; nor to employees engaged on emergency work; nor to outside salesmen; nor to employees in a managerial, executive, administrative or supervisory capacity, who now receive more than \$35.00 a week. Population for the purposes of this agreement shall be determined by reference to the 1930 Federal Census.

### Minimum Wages

"(D) Employees shall be paid at the rate of:

(1) Not less than \$15 a week in any city of over 500,000 population or in the immediate trade area of such city;

(2) Not less than \$14.50 a week in any city between 250,000 and 500,000 population or in the immediate trade area of such city;

(3) Not less than \$14 a week in any city between 2,500 and 250,000 population or in the immediate trade area of such city, and

(4) In towns of less than 2,500 population all wages shall be increased by not less than 20 per cent, provided that this shall not require wages in excess of \$12 a week.

(5) This paragraph shall apply to all employees, except those covered by the provisions of the following paragraph (E).

"(E) Employees of the classes who on July 1, 1933, were paid on an hourly rate shall be paid not less than 40 cents per hour, unless the hourly rate for the same class of work on July 15, 1929, was less than 40 cents per hour, in which latter case the rate of pay shall not be less than the July 15, 1929, hourly rate of pay and, in any event, shall not be less than 30 cents per hour;

"PROVIDED that learners may be paid not less than 80 per cent of the minimum wage rate provided in the above schedule, but the total number of learners shall not exceed 5 per cent of the total number of employees employed by any employer subject to this Code."

### Administered by A.G.A.

#### IV.

**APPLICATION**—If any employer of labor in this industry is also an employer of labor in any other industry, the provisions of this agreement shall apply to and affect only that portion of his business which is included in this industry.

#### V.

**ADMINISTRATION**—The American Gas Association is hereby designated the agency for administering, supervising and promoting the performance of the provisions of this code by the members of the manufactured and mixed gas public utility industry. The American Gas Association shall appoint a Recovery Executive Committee to exercise such functions on behalf of the American Gas Association and the facilities and departments of the American Gas Association shall be available to make the administration effective and efficient.

In order to keep the President of the United States and the Administrator informed as to the observance or non-observance of this Code, each employer shall prepare and file with the statistical department of the American Gas Association at such times and in such manner as may be prescribed, statistics covering the number of persons employed, wage rates, earnings, hours of work and such other data or

information as the Recovery Executive Committee may from time to time require.

Any employer may participate in this code and in any revisions or additions thereto by signifying his intention and accepting the proper pro rata share of the cost and responsibility of creating and administering it, either by becoming a member of the American Gas Association or by paying to it an amount equal to the dues from time to time provided to be paid by a member in like situation of the American Gas Association.

#### VI.

**AMENDMENTS**—Such of the provisions of this code as are not required to be included therein by the National Industrial Recovery Act may, with the approval of the President, be modified or eliminated as changes and circumstances or experience may indicate.

This code shall become effective when approved.

## NATURAL GAS CODE

Following are the code provisions for the natural gas industry:

### PURPOSES

The declared purpose of this code is to effectuate the policy of Title I of the National Industrial Recovery Act during the period of emergency.

### DEFINITION

The Natural Gas Division of the American Gas Association affirms that it imposes no inequitable restrictions on its membership and participation in its activities, and it is truly representative of a national association of the natural gas industry.

The term "employer" as used herein includes every person, firm or corporation engaged in the production, transmission and/or distribution of natural gas for domestic, commercial and/or industrial consumption.

The term "employee," as used herein, shall include all persons employed in the conduct of such operations.

#### I.

**LABOR PROVISIONS**—As required by Section 7 (a) of Title I of the National Industrial Recovery Act, the following provisions are conditions of this code:

### Collective Bargaining

1. Employees shall have the right to organize and bargain collectively through representatives of their own choosing, and shall be free from the interference, restraint, or coercion of employers of labor, or their agents, in the designation of such representatives or in self-organization or in other concerted activities for the purpose of collective bargaining or other mutual aid or protection.

2. No employee and no one seeking employment shall be required as a condition of employment to join any company union or to refrain from joining, organizing or assisting a labor organization of his own choosing; and

3. Employers shall comply with the maximum hours of labor, minimum rates of pay, and other conditions of employment, approved or prescribed by the President.

#### II.

**CHILD LABOR**—After Aug. 31, 1933, no person under sixteen years of age shall be employed, except that persons between fourteen and sixteen years of age may be employed for not to exceed three hours a day and those hours between 7:00 a. m. and 7:00 p. m., in such work as will not interfere with hours of day school.

### Hours of Employment

#### III.

**HOURS OF EMPLOYMENT AND WAGES**—The following paragraphs in this section III are in substitution for paragraphs 2 to 7, inclusive, of the President's Reemployment Agreement. (Substitution Approved Aug. 11, 1933, by National Recovery Administration.)

"(A) No employee shall work for more than an average of 40 hours per week during any six weeks' period, except those specified in Paragraph (B).

"(B) Load dispatchers, well operators, station operators, and emergency maintenance and repair employees, their attendants, crews and helpers, if highly trained and not readily replaceable, whose duties must be continuously performed in order to render the public a safe and continuous service, may be employed not in excess of 48 hours per week, so long as other competent employees are not readily available for such work, and in emergencies such employees may work more than 48 hours per week, but in no case shall the hours worked exceed an average of 48 hours for six consecutive weeks. All employers subject to this code shall proceed with the training of additional employees as rapidly as is consistent with the rendition of safe and continuous service, so that by March 1, 1934, as many employees as possible may be reclassified under the 40 hours per week limitation; and report shall be made on said date of the extent of such reclassification to the National Recovery Administration.

"(C) The maximum hours fixed in the foregoing paragraphs shall not apply where not more than two persons are employed in communities of less than 2,500 population, which com-

munities are not part of a larger trade area; nor to employees engaged on emergency work; nor to outside salesmen; nor to employees in a managerial, executive, administrative or supervisory capacity, who now receive more than \$35 a week. Population for the purposes of this agreement shall be determined by reference to the 1930 Federal Census.

### Wage Scales

"(D) Employees shall be paid at the rate of:

(1) Not less than \$15 a week in any city of over 500,000 population or in the immediate trade area of such city;

(2) Not less than \$14.50 a week in any city between 250,000 and 500,000 population or in the immediate trade area of such city;

(3) Not less than \$14 a week in any city between 2,500 and 250,000 population or in the immediate trade area of such city, and

(4) In towns of less than 2,500 population all wages shall be increased by not less than 20 per cent, provided that this shall not require wages in excess of \$12 a week.

(5) This paragraph shall apply to all employees, except those covered by the provisions of the following paragraph (E).

"(E) Employees of the classes who on July 1, 1933, were paid on an hourly rate shall be paid not less than 40 cents per hour, unless the hourly rate for the same class of work on July 15, 1929, was less than 40 cents per hour, in which latter case the rate of pay shall not be less than the July 15, 1929, hourly rate of pay and, in any event, shall not be less than 30 cents per hour;

"PROVIDED that learners may be paid not less than 80 per cent of the minimum wage rate provided in the above schedule, but the total number of learners shall not exceed 5 per cent of the total number of employees employed by any employer subject to this Code."

### Administration of Code

#### IV.

**ADMINISTRATION**—The Natural Gas Division of the American Gas Association is hereby designated the agency for administering, supervising and promoting the performance of the provisions of this Code by the members of the natural gas industry. The Natural Gas Division of the American Gas Association shall appoint a Recovery Executive Committee to exercise such functions on behalf of the Natural Gas Division of the American Gas Association and the facilities and departments of the American Gas Association shall be available to make the administration effective and efficient.

In order to keep the President of the United States and the Administrator informed as to the observance or non-observance of this Code, each employer shall prepare and file with the statistical department of the Natural Gas Division of the American Gas Association at such times and in such manner as may be prescribed, statistics covering the number of persons employed, wage rates, earnings, hours of work and such other data or information as the Recovery Executive Committee may from time to time require.

Any employer may participate in this Code and in any revisions or additions thereto by accepting the proper pro rata share of the cost and responsibility of creating and administering it, either by becoming a member of the Natural Gas Division of the American Gas Association or by paying an equitable proportion of the administration cost.

#### V.

**AMENDMENTS**—Such of the provisions of this Code as are not required to be included therein by the National Industrial Recovery Act, may, with the approval of the President, be modified or eliminated as changes and circumstances or experience may indicate.

This Code shall become effective ten days after date of approval.

## KELVINATORS INSTALLED IN MARINE HOSPITAL

DETROIT—Several installations of Kelvinator equipment were made in the U. S. Marine Hospital here when that structure was remodeled recently.

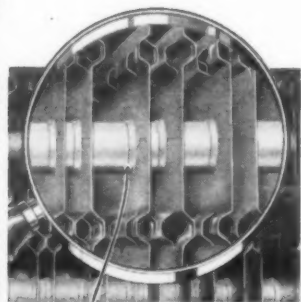
A household model was placed in the hospital pharmacy for preservation of biologicals. Four Kelvinators were installed in diet kitchens which are a part of the hospital's new wing, and three more went to officers' residences.

Kelvinator commercial equipment cools all water in the hospital's additional quarters. The new six-compartment mortuary box in the attendants' and laundry building was Kelvinated, and another unit was installed to cool the Seeger refrigerator in the main kitchen of the nurses' home.

## WESTINGHOUSE UNITS ARE BOUGHT BY RESORT

RALIEGH, N. C.—Seven Westinghouse water coolers and several commercial refrigerators have been installed in buildings of Carolina Pines, Inc., a new resort near here, by the Thompson Electrical Co., Westinghouse dealer of this city.

10 Reasons why sales of FEDDERS non-frost Commercial Evaporators have increased 398% over 1932



Close-up photo showing Fedders Fused Metal-to-Metal Bond between Copper Fins and Tubes

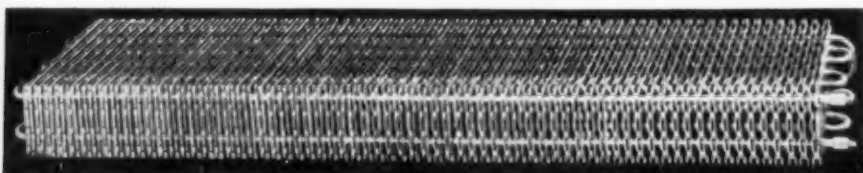
FEDDERS MFG. CO.  
57 Tonawanda St.,  
Buffalo, N. Y.

116 Broad St., New York  
603 W. Washington Blvd.,  
Chicago

923 E. Third St.,  
Los Angeles

1. COPPER FINs fused to Copper Tubes
2. RAPID HEAT TRANSFER . . . . .
3. FUSED METAL-TO-METAL BOND between fins and tubes
4. LIFE-LONG EFFICIENCY . . . . .
5. ELECTROLYSIS IMPOSSIBLE between fins and tubes
6. 5/8" O.D. TUBES with flat fins . . . . .
7. 3/4" O.D. TUBES with fluted fins . . . . .
8. FIN HEIGHTS FROM 1 1/4" UP. Quick delivery on over 1,000 models
9. VARIOUS FIN SPACINGS . . . . .
10. FOR USE WITH ALL STANDARD REFRIGERANTS
11. SILVER SATIN FINISH assuring everlasting appearance

Write for Fedders Complete Working Data Book No. 40





## 12,000 Register in Detroit Store's 'Kitchen Carnival'

DETROIT—Names of 12,000 purchasers were registered during the first week of Crowley-Milner & Co.'s Kitchen Carnival and sale now being held over for its second week in the department store's household equipment division.

"We estimate that this represents about a third of the total number of persons visiting the Carnival," stated W. A. Riordan, assistant merchandising manager of the household appliance department.

Held in connection with the department store's September sale of home furnishings, the Carnival features 60 demonstrations of kitchen utensils, electrical appliances, food products, and related equipment. Trained demonstrators from the companies represented hold forth behind the counters, which are decorated in imitation of booths at a county fair. A sign over each booth bearing the name of the equipment featured is decorated with caricatures of clowns.

Special attention-getting feature of the Carnival during its first week was a mechanical chef who walked among the crowds. He would approach an exhibit and would suddenly freeze into immobility, defying the most curious to say that he was alive. After a sufficient amount of interest had been aroused he would come to life and move on.

Part of the clown-chef was played by Mr. Burrell, nationally famous for his ability to stand for several minutes literally without batting an eyelash.

Newspaper advertising every other day, a circular sent to 30,000 people, and announcement cards on the main floor of the store have publicized the Carnival. Samples and household helps such as recipe books are given away at the booths.

Companies whose products are being featured at the Carnival are as follows:

Aluminum Goods Mfg. Co. (Mirro utensils); Aluminum Cooking Utensil

Co. (Wear Ever utensils); American Bird Products; Chicago Curtain Stretcher Co.; Du All Mfg. Co. (mops and polishes); Enterprise Aluminum Co. (Dripolators, Eggolators, broilers); Japana Mfg. Co. (chrome and cast iron ware).

Landers-Frery & Clark (Universal electrical appliances); Handy-Andy Co. (juice extractors); Waters-Genters (Toaster toasters); Master Bakepot Co. (Master Bakepot oven); Stanley Savage Co. (Ovenettes); Pinless Curtain Stretcher Co.; McCleary Mfg. Co. (Wafflelets and rug cleaner); Tricolorator Co. (coffee makers); Pure Lemon Juice Co.; Silex Mfg. Co. (coffee makers); National Washboard Co. (ironing boards).

White Star Stoves; Kitchen Katchall (jar opener); McCord Radiator Co. (ice cube trays); Vacuum Electric Co. (electric plates); August Thompson & Co. (cooky makers); Polar Ware Co. (enamelware); George S. Leiner Co. (brushes and mops).

Westinghouse Electric & Mfg. Co. (heaters); Sherwin Williams Co. (paints and varnishes); S. C. Johnson Co. (floor waxes); Acme White Lead Works (floor polish); Miracle Wax Co. (floor wax).

Frigidaire Corp. (refrigerators); Kelvinator Corp. (refrigerators); General Household Utilities Co. (Grunow refrigerators); Easy Washer & Ironer Co.; 1900 Washers & Ironers; Thor Washer & Ironers; Magic Chef Co. (gas ranges); Detroit-Jewel Co. (gas ranges); Glass Bake Cooking Ware; General Electric Co. (Mazda bulbs).

### EARL MANIER WILL MANAGE KELVINATOR STORE

BUFFALO—Earl Manier has been appointed manager of Swegler's Main Store, Kelvinator dealer here. The store is now holding weekly cooking schools conducted by Swegler's home economist, Norma Neihoff.

## NRA WANTS INDUSTRY TO CONTROL ITSELF

CHICAGO—That industry control by its own associations rather than by the government is the ideal toward which the National Recovery Administration is striving was stressed by Maj. A. Heath Onthank, chief of the control division of NRA speaking on "What is Expected of Industry under the Recovery Act," here Sept. 8 before the American Photo-Engravers Association convention.

After discussing the formulation of a code for each industry, Major Onthank expressed some views on the probable future of an industry after its code has been approved and is in operation.

"The most certain feature to expect, he predicted, is that industry will be called upon to administer its own affairs with the least possible regulations by the Government. Industry is to be—must be—its own ruler, within the limitations of its code.

"I cannot stress this point too strongly. Trade associations are being given all the power they need to govern properly the affairs of their industries. They are to be the enforcing agencies. They will be taught gradually to be independent of government authority in administering the provisions of their codes.

"No other basic philosophy can possibly be contemplated for industry in America. This is not communist Soviet Russia where millions of people can be virtually enslaved to do dumbly and inarticulately the bidding of a small minority, no matter how worthy the purpose. Neither is this an off-shoot of Facism, where the welfare of the individual is wholly and completely submerged in the idea of a central state dominant.

"This act, in fact, adheres to the very principles on which our nation was founded, the welfare of the individual through cooperation of all elements of the state to ensure and strengthen his economic existence.

"Under general rules laid down by

his government the individual regulates himself. This is industrial cooperation at its highest point. For this we established an ordered government. This is true democracy.

"Each industry, then, will govern itself. Only in those instances where ignorant, stubborn or malevolent elements of an industry refuse to play the game, and are found incapable of regulation by the industry's self-governing agency, will the National Recovery Administration step in, and even then, only on request.

"The bugaboo of a great federal bureaucratic rule is ridiculous. The federal government will be a referee, and if necessary, an enforcing agency, but only as a last resort when all other means have failed.

"Much of the success of your industry in self-government under your code will come from the spirit in which you accept this leadership. You, more than I, know that there are abuses in your industry which must be remedied if you are all to reach that plane of profitable operation which will permit you to do your part for labor. These abuses must be eradicated.

"There is no place for recalcitrant minorities operating under the former catch-as-catch-can system of selling. There are new rules for the game now; rules with a courageous referee to enforce them. Woe be to the man who attempts to buck both the referee and the rules committee! Those of you who remember a certain ill-starred world series know what happened to similar transgressors in the baseball industry. So will it be in every industry for unfair ball.

"So you may look forward to more profitable, more harmonious relations with each other. You will probably find that certain competitors do not wear horns and a tail after all. Many competitors who have recently met each other in code-drafting meetings have discovered much more than that—they have found human relationships which augur well for the future harmony of their industries.

"On the other hand, there will be no toleration of the non-cooperator. The man who won't play this new game may see the light rather suddenly. There is not place in industry

for the lone wolf; there is a bounty on wolves!

"Finally, what of the future? "The N. I. R. Act lasts by statute for two years, or less if the President so decrees. What then? Will all this effort be discarded? Will industry be allowed to fall back into a new Dark Age of unrestrained competition?

"Probably only one man knows the answer—the President. And who are we to place words in his mouth? It is safe to say, however, that industry itself will demand that the proven good parts of the N. I. R. A. shall be carried on. National economic planning, once successful, will not be thrown overboard. The country will refuse to revert to economic chaos.

"The charters that are being written for your industry will, we hope, become the birth of a new economic order. They will be America's answer to the world; Democracy's plan to save free peoples. Under similar inspired leadership, with such a national crusading spirit, the American plan of self-governing industry may well be the dawn of a new day of Economic Freedom."

### TRILMONT STAGES 20-MILE BICYCLE RACE

PHILADELPHIA—Trilling & Montague, Norge distributor here, recently sponsored a 20-mile bicycle race as a feature of its annual outing for dealers and salesmen. Sixty of the 200 entrants finished the race, five of them women. Thirty-four prizes were awarded. Several of the cyclists came from California, New York, and New Jersey for the event.

### NORGE DISTRIBUTOR USES LARGE DISPLAY TRUCK

BOSTON—General Equipment Corp., Norge distributor here, is using a large truck with an open display of seven Norge refrigerators and an Economaid washer to draw attention to these lines of merchandise. The truck moves through Boston's residential districts, broadcasting melodies with its amplifying system the while.

# These 3 FEATURES exclusive with DELCO MOTORS



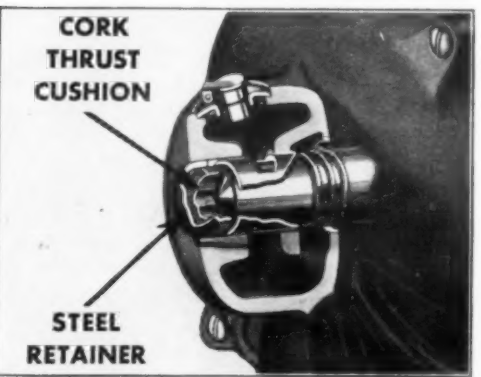
## Non-spillable end-head . . .

Both over-oiling and leaking on the windings are effectively prevented by this exclusive feature of Delco refrigerator motors. In combination with the patented oil reservoir and the special arrangement of the wick and oil control, this improvement in Delco motors also assures retention of oil during shipment, installation, and operation. These advantages constitute Delco's SEALED LUBRICATION—an important factor in assuring satisfaction to your owners long after the warranty period of the refrigerator itself has expired.



## Rubber cradle mounting . . .

By literally floating the motor in rubber, with no metal-to-metal contact whatever, this second exclusive Delco feature completely insulates the motor mounting against vibration and noise. The rubber is vulcanized to both the motor ring and the mounting. It permits sufficient rotative twist, yet prevents mis-alignment of shaft or pulley. Creeping is impossible, and oil cannot get in to cause deterioration. This rubber cradling is another reason why Delco motors help to keep the users of Delco-powered refrigerators satisfied.



## No end-play noise . . .

End-play is inescapable in motors which operate belt-driven compressors. Delco motors, however, eliminate the usually attendant noise with a cork insert, pressed into the end-head of the steel shell. This cork cushions the longitudinal movement of the rotor. It is amply lubricated always . . . will not wear out . . . and needs no adjustment or replacement. Its elimination of end-play noise is, consequently, a permanent advantage of Delco refrigerator motors. For your customers' satisfaction, and in the interests of your warranty costs, consider all three of these exclusive features when you select compressor motors.

Delco motors are on display at  
A Century of Progress



DELCO PRODUCTS CORPORATION  
DAYTON, OHIO



## ENGINEERING

### VIKING COOLERS USE SWEET WATER BATH

PHILADELPHIA—A line of draft beer cooling and dispensing units is being manufactured and sold by the Equipment Sales Co. of this city under the trade name "Viking."

Cooling is accomplished by the sweet water bath method, with expansion coils and beer coils being immersed in the bath. The water bath is brought up to within an inch or so of the draft arms to provide maximum cooling. Temperature control is by the thermostatic expansion valve.

Storage compartments are fitted with a fin coil at a top, with a baffle to provide air circulation.

Each beer faucet is furnished with 50 ft. of six ounce block tin coil, water faucets with 30 ft.

"Viking" beer cooling cabinet can be obtained in two-faucet bar insert models, or in master units with three, four, or five faucets and sink and glass rack combinations.

Insulation in the "Viking" cabinets is 2½-in. Celotex and two layers of "Vikoid" forming three air spaces between the outer wall and the inner insulation.

The cabinets are obtainable either in all-steel or wood construction. Steel unit boxes are built over a framing of copper bearing steel angles, with points and corners welded.

Wood unit boxes are made from oak for all exposed facings. Bottom and rear are built of white pine.

The entire interior is protected by a lining of cold rolled copper, tinned inside.

Channels of "Viking" faucets have a liner of block tin. Faucet parts are made of bronze, polished when fitted to brass or copper faced units, and chrome-plated when fitted to stainless steel units.

Facings are available in stainless steel, polished brass or copper, or porcelain enamel.

### York Head Urges Air Conditioning Of Tap Room

YORK, Pa.—Proprietors of beer dispensing establishments who air condition their tap rooms to supply a continuous supply of fresh air in constant circulation, keeping the atmosphere always clear of tobacco smoke and food and beer odors, will be getting the jump on their competitors, believes W. S. Shipley, president of the York Ice Machinery Corp.

"People patronize air-conditioned movies and air-conditioned stores and offices," points out Mr. Shipley, "but they can only stay in these places a limited time. You and I can go into a tap room and stay as long as we like, and if the temperature and humidity are always just right for our comfort, regardless of what it may be like outside, we are going to come there often, stay longer, and spend more money."

"Tap rooms have come into existence with the return of beer. Many of them are established in substantial, well-appointed buildings and some in old mansions. No expense has been spared to make their interiors inviting to the most exclusive class of patronage. Yet the air in one of these tap rooms can very quickly become dead, lifeless, and stagnant."

"It is a simple matter to install one or two unit-type air conditioners, to provide for the circulation of fresh, filtered air at an even temperature. Such units may be attractively finished to harmonize with any furnishings or decorations, and their installation in the present day tap room would involve no large expenditure or major alterations."

### M-W ADDS QUARTER BARREL

LANSING, Mich.—Motor Wheel Corp. here has added a quarter-barrel to its line of Duo-Steel beer barrels placed on the market in July.

### Kramer Announces "Shelf" Evaporators



[A request will bring you the specifications and prices for "Shelf" Coils. And—do you have the General Catalog No. 433?]

### TRENTON AUTO RADIATOR WORKS

Main Offices and Factory, TRENTON, NEW JERSEY  
NEW YORK: 241 West 68th Street PITTSBURGH: 5145 Liberty Avenue



### Tubing—Plus or Minus?

We believe there's a big chance for plus or minus values in Dehydrated Seamless Tubing—outside the ordinary specifications and inspection. We call this to your attention—not because we claim 100% plus value—but because we feel that our everlasting effort to improve quality deserves recognition—for your benefit and ours. WOLVERINE TUBE CO., 1491 Central Avenue, Detroit, Mich. Sales Offices in 29 cities. Export Dept., H. M. Robins



**WOLVERINE**  
Seamless Copper Tubing  
For Refrigeration

### Victor's Viennese



Victor Diesenhofer, famous caterer and proprietor of the Ice-O-Matic and Larkin equipped Victor's Vienna Cafe at A Century of Progress, discusses business with two of his waitresses.

### Fair Cafe Employs Williams Units & Larkin Coils

CHICAGO—Williams Ice-O-Matic commercial and domestic equipment is used to refrigerate all foods and beverages served to patrons of the Victor Vienna Cafe at A Century of Progress here.

A 3-hp. Ice-O-Matic compressor, connected with four Larkin Humi-Temp coils and controlled by a Larkin Positrol, cools the 102x9x7-ft. room in which beer, meats, and foods are stored. A temperature of 36 to 40° F. is maintained in this room, which is insulated with one sheet of Celotex and three in. of sawdust.

Commercial refrigerator cabinet used in the cafe's kitchen is cooled by a 1½-hp. Williams compressor connected to two Larkin Humi-Temp coils. Another 3-hp. Ice-O-Matic compressor cools all beer for the nine-tap dispenser in the cafe.

Behind the short order counter, where approximately 3,000 snacks are served daily, are four model P-11 Ice-O-Matic household models for storage of salads and similar perishables.

Williams equipment is also in use in the Fair's Muller-Pabst restaurant, Schlitz Garden Cafe, Time and Fortune building, and in the livestock and meat exhibit located in the center wing of the Food and Agricultural building.

An Oil-O-Matic oil burner is in daily use at the Coca-Cola exhibit, operating the boiler in that company's model bottling plant.

### SELLS \$885 COMMERCIAL JOB TO LUNCH WAGON

NEW BEDFORD, Mass.—Kelvinator Dealer William Beserosky here recently got an order for two rubber ice cube trays, then turned it into an \$885 commercial installation.

Three times Mr. Beserosky had called on a lunch wagon proprietor, trying to sell some Kelvinator equipment. The answer was always "No." Then the lunch wagonman called up, placed an order for two rubber ice trays. Mr. Beserosky knew the man had no household refrigerator, delivered the trays himself, asked how they were to be used.

"I'm going to freeze cubes in my ice cream cabinet," was the answer. Dealer Beserosky looked over the wagon's equipment, then propositioned: "I'll deliver your ice for you at half of what you are paying now."

Items purchased: Temprite beer cooler, storage refrigerator coils, CT-70 serving box coil, compressors to operate the equipment. Several weeks later, the purchaser took up his notes, paid the remainder of the debt in cash, according to Mr. Beserosky.

### UNIVERSAL EQUIPMENT TO COOL CINCINNATI THEATER

CINCINNATI—Now being installed in the Strand Theater here is a 75-ton air conditioning system, refrigeration equipment for which was supplied by the Universal Cooler Corp. of Detroit. The theater has a seating capacity of 1,200.

Seven 10-ton Universal condensing units connected to seven Trane coils—each coil equipped with six Universal thermostatic expansion valves—supply cooling for the auditorium of the theater. A 70-ton Schubert Christie cooling tower on the roof of the building supplies water for cooling the condensing units in the basement.

Conditioned air is carried to the theater's auditorium through ducts located in the ceilings, balcony, and side walls, and is returned to the units through mushroom ducts on the floor of the room.

A five-ton Universal direct expansion system is also being installed to cool the foyer and area surrounding the ticket office, according to Universal Cooler engineers. F-12 is the refrigerant used in all the units.

The system is being installed by the Wurlitzer company here.

### METALS CONGRESS WILL MEET OCT. 2

DETROIT—Six national technical associations are sponsoring the fifteenth annual National Metal Congress and Exposition to be held in Detroit from Oct. 2 to 6, featuring about 60 technical papers on metallurgical subjects, trips through Detroit factories, and exhibits of metal and equipment manufacturers in Convention Hall.

Cooperating organizations are the American Society for Steel Treating, Institute of Metals, Iron and Steel division of American Institute of Mining and Metallurgical Engineers, American Welding Society, Wire Association, and American Society of Mechanical Engineers. A separate program is being arranged by each group.

On Wednesday morning, Oct. 4, H. J. French, in charge of International Nickel Co.'s alloy steel and iron development, is to give the 1933 Campbell Memorial Lecture on "Fatigue and Hardening of Steels."

Presenting 30 papers in 10 sessions, the American Society for Steel Treating features more technical addresses than any of the other groups. The American Welding Society is a close second with 29 papers to be delivered at its 7 sessions. Program of the Institute of Metals and Iron and Steel division of American Institute of Mining and Metallurgical Engineers calls for 4 sessions and the reading of 14 papers.

A trip through Kelvinator Corp. is one of the high spots in the American Society of Mechanical Engineers' program, which will also include a business session and two technical addresses. The Wire Association will hold a business meeting, technical sessions, and informal get-togethers during its three-day meeting.

Detroit plants which will be inspected by the visiting metallurgists are:

Barnes-Gibson-Raymond, Inc., Bohn Aluminum & Brass Co., Bower Roller Bearing Co., Chevrolet Motor Co., Climax Molybdenum Co., Detroit Edison Co., Detroit Seamless Steel Tubes Co., Detroit Steel Corp., Dodge Bros. Corp., Ford Motor Co., Gemmer Mfg. Co., General Motors Research Laboratories, Great Lakes Steel Corp., Michigan Steel Castings Co., Packard Motor Car Co., Timken Detroit Axle Co., and General Motors Proving Ground.

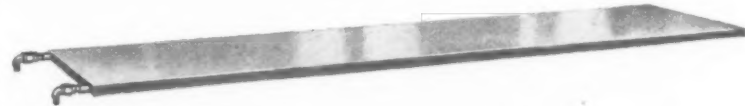
### Brown Introduces New Temperature Chart

PHILADELPHIA—Embodying a number of special features, a new recording thermometer and pressure gauge is being introduced by the Brown Instrument Co. here.

Standard equipment on this instrument is a telechron motor chart drive. The device also has a lever which releases the pen automatically when the front of the instrument is opened, and returns it to the correct position on the chart when the door is closed.

Chart knob has been eliminated on the new thermometer, a small hub on which the chart is pressed being used instead. Door of the instrument has a combination handle and lock, and inside the door is a toggle switch which starts and stops the chart drive.

The case in which the mechanism is enclosed is adaptable for either flush mounting or front-of-board installation. The device will withstand 100 per cent overloads, and has a spring-bellows mechanism for pressures between 30 and 200 lbs.



### Larkin Vacuum Plate Coil Opens New Sales Field

AMONG the many uses of the Larkin Vacuum Plate Coil is for cafes, delicatessens and other stores selling salads, cold meat plates and all perishable foods. The coil (pictured above) is installed right in the show case and a fluffy white frost gives a cool and appetizing appearance to the display.

Stock sizes available from 4" to 34" by 14" in length. Special sizes from 37" to 58" wide by 199" long.

Send for special literature and prices. This Larkin Plate Coil offers ready sales to live, hustling dealers and distributors.

LARKIN Refrigerating Corporation

Originator and Manufacturers

ATLANTA, GA., U.S.A.

U.S. PATENT NO. 1,774,238





## U. S. Collects \$2,111,868 Excise Tax On Refrigerators During Year, \$2,206,763 on Radios

The Revenue Act of 1932 completed its first year of operation on June 30, 1933. The preliminary statement which was released by the Bureau of Internal Revenue of the U. S. Treasury Department on July 31, 1933, summarizes the receipts collected under the provisions of the act.

Included in the report is a listing of revenues collected from manufacturers of mechanical refrigerators and from manufacturers of radio sets and phonograph records.

In both the refrigerator and radio fields the tax imposed is equivalent to 5 per cent of the wholesale price at which the manufacturer or his sales corporation bill the distributor.

Taxable articles in the refrigerator line include household refrigerators and parts and accessories sold on or in connection with the sale thereof, cabinets, compressors, condensers, expansion units, absorbers, and controls.

The following articles of radio apparatus are taxable: chassis, cabinets, tubes, reproducing units, power packs, phonograph mechanisms, and phonograph records.

Excise revenues accruing from the assessment on manufacturers' sales of refrigerators and components amount-

ed to \$2,111,868.26 for the fiscal year June 30, 1932, to June 30, 1933. Of this total \$2,031,882.56, or over 96 per cent, was paid by manufacturers producing in the five states of Ohio, Michigan, Indiana, Illinois, and Pennsylvania.

Ohio refrigerator manufacturers alone paid excise sales taxes amounting to \$831,610.80, or 39 per cent, while those in Michigan contributed \$599,732.03, or 28 per cent. No refrigerator sales taxes were collected in 27 states.

In the radio field excise revenues from manufacturers' sales amounted to \$2,206,763.39 during the fiscal year. Manufacturers in Illinois, Indiana, Massachusetts, New Jersey, New York, Ohio, and Pennsylvania paid in \$1,992,613.43 or in excess of 90 per cent of the total collected on sales of radio apparatus and phonograph mechanisms and records.

The highest receipts were in New Jersey where manufacturers were assessed \$620,726.71, or 28 per cent while Illinois producers paid in \$396,907.66, or 18 per cent, and those operating in Pennsylvania contributed \$355,658.60, or 16 per cent. In 23 states no radio excise taxes were collected.

The following table lists the revenue

receipts from refrigerator and radio sales by states:

State or Territory	Mechanical Refrigerators 5 Per Cent	Radio Sets, Phonograph Records, etc 5 Per Cent
Alabama	\$ 168.77	\$ .....
Arizona	.....	.....
Arkansas	.....	.....
California	11,795.99	39,557.19
Colorado	.....	.....
Connecticut	233.77	16,424.52
Delaware	.....	.....
Florida	.....	.....
Georgia	.....	.....
Idaho	.....	.....
Illinois	202,442.61	396,907.66
Indiana	256,721.57	144,765.63
Iowa	1,518.96	900.25
Kansas	271.89	41.73
Kentucky	.....	48,033.27
Louisiana	.....	.....
Maine	.....	.....
Maryland	15.10	209.81
Massachusetts	13,527.76	130,192.01
Michigan	599,732.03	95,049.31
Minnesota	18,803.06	1,627.40
Mississippi	.....	.....
Missouri	272.75	587.17
Montana	.....	.....
Nebraska	.....	21.44
Nevada	.....	.....
New Hampshire	1,205.62	.....
New Jersey	2,454.12	620,726.71
New Mexico	.....	.....
New York	23,592.45	232,166.97
North Carolina	.....	10.22
North Dakota	.....	.....
Ohio	\$31,610.80	112,195.85
Oklahoma	.....	.....
Oregon	.....	2.25
Pennsylvania	141,375.55	355,658.60
Rhode Island	370.20	6,832.58
South Carolina	.....	.....
South Dakota	.....	.....
Tennessee	2,102.02	.....
Texas	.....	11.45
Utah	.....	.....
Vermont	.....	.....
Virginia	.....	230.86
Washington	319.92	2,474.52
West Virginia	.....	.....
Wisconsin	3,329.07	1,431.53
Wyoming	.....	.....
Alaska	.....	.....
District of Columbia	.....	206.96
Hawaii	4.63	604.23
<b>Total</b>	<b>\$2,111,868.76</b>	<b>\$2,206,763.39</b>

## Ohio Builds 39% of Refrigerators



Distribution by states of the 5 per cent federal tax on electric refrigerators and their component parts for year ending June 30 is shown above.

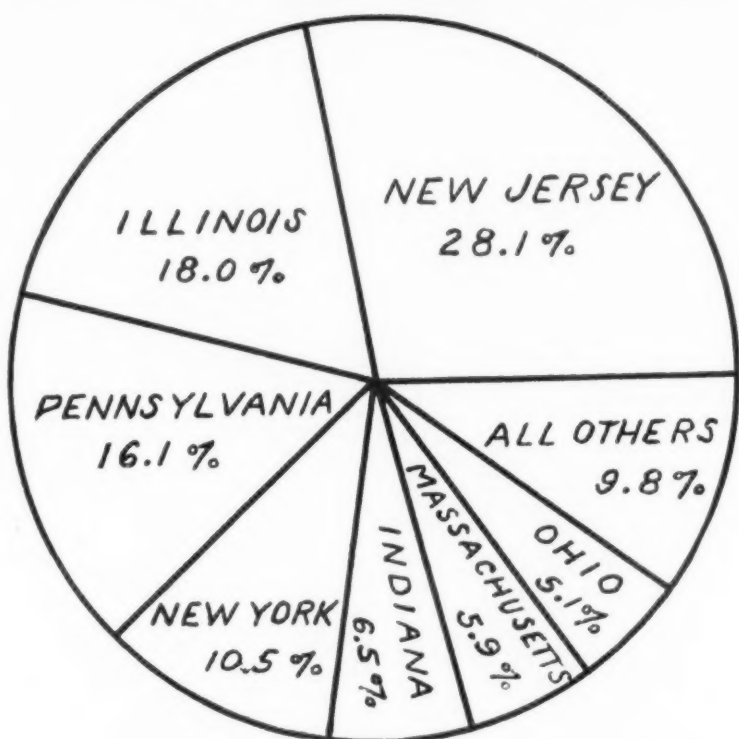
## H. W. THORN NEW PRESIDENT OF HOLLAND FURNACE CO.

HOLLAND, Mich.—H. W. Thorn has been elected president and treasurer of the Holland Furnace Co., manufacturer of air-conditioning equip-

ment for residential use. He succeeds C. H. Landwehr.

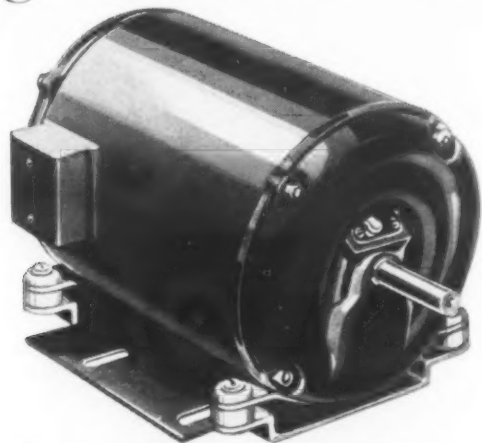
Other officers elected are P. T. Cheff, vice president in charge of production; P. W. Burns, vice president in charge of sales; William Tahaney, secretary; and G. B. Tinholt, assistant secretary.

## New Jersey Leads Radio Production



New Jersey manufacturers paid the largest share of the federal excise tax on radio sets and phonograph records. The government report covers the first year of collection of the tax up to June 30, 1933.

## Long, Carefree Service



## A Big Feature of Howell's Built-in Capacitor Motor

A simplicity of parts is the answer. When Howell engineers built the capacitor inside the motor frame, they also simplified construction. No commutator, no wire-wound rotor, nothing to get out of adjustment on these fractional horsepower motors.

This new motor gives you satisfactory and economical service over a long period of time with a minimum of attention. It starts smoothly and quietly, is quiet in operation, and has a liberal overload capacity. This is why it should be your choice for electric refrigerator and other home appliance application.

Both horizontal and vertical types are offered, with rubber or rigid mounting on the horizontal models. Also stators and rotors for built-in equipment.

Howell Sales and Service in over 50 Principal Cities

## Howell Electric Motors Co.

Howell Michigan  
Pioneer Builders of Capacitor Start Motors

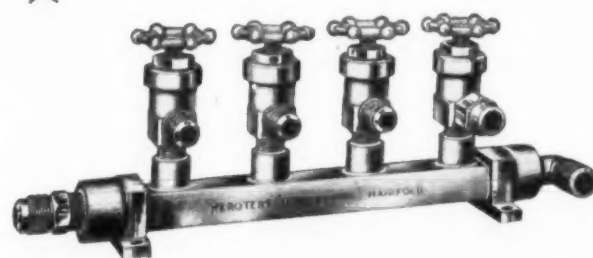
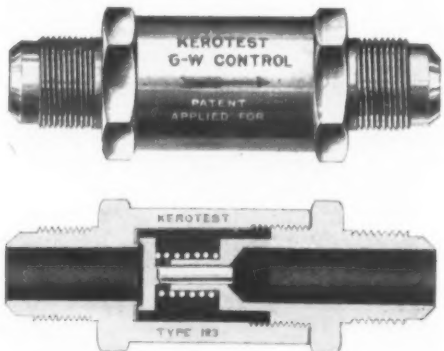
# NEW KEROTEST PRODUCTS

of special interest to every refrigeration engineer

FOR REDUCING RUNNING TIME OF COMPRESSOR TO THE MINIMUM  
**KEROTEST GW CONTROL**  
(5/8 in. SAE Size Type 123)  
(1/2 in. SAE Size Type 120)

Acclaimed by a nationally known refrigeration engineer as "one of the greatest advancements in refrigeration mechanics in the past ten years." When placed on the suction side of the unit between the evaporator and compressor, the GW Control prevents higher back pressures in the lower pressure coil... eliminates interference with the operation of the thermostatically controlled expansion valve... makes possible complete control of the compressor switch... enables each coil to act independently thus reducing running time to the minimum.

Write for detailed information.



## COMMERCIAL MANIFOLDS EQUIPPED WITH EXTRA LARGE VALVES—

Refrigeration engineers needed it—Kerotest met it, as usual, with the new line of Commercial Manifolds with LARGE VALVES having 5/8 in. SAE flare connections on the lateral openings and 3/4 in. or 1 in. female pipe openings on the ENDS in addition to the smaller manifolds with 1/2 in. SAE lateral flare connections and 3/8 in. or 1/2 in. pipe end openings... furnished with the exclusive Kerotest Packed or Packless Valves and equipped with handwheels... There are no restrictions through Kerotest Manifolds or Valves and the openings are always equal to the full size of the tubing.

## KEROTEST MANUFACTURING CO., PITTSBURGH

Amarillo, Texas . . . 816 Grant St.  
Axtell Co.  
Atlanta, Ga. . . . 885 Marietta St.  
J. M. Tull Rubber and Supply Co., Inc.  
Baltimore, Md. . . . 108 South Street  
Clendenin Bros., Inc.  
Boston, Massachusetts . . . 110 High Street  
A. E. Borden Co.  
Cincinnati, Ohio . . . Barbank Street  
Merkel Bros. Co.  
Cleveland, Ohio . . . 1748 East 22nd St.  
Williams & Company, Inc.  
Decatur, Illinois . . . 133 Williams St.  
Field & Shorb Co.  
Denver, Colorado . . . 14th at Lawrence  
The Auto Equipment Co.  
Des Moines, Ia. . . W. 11th & D.M.U.R.R.  
C. L. Percival Co.

**LOCAL REPRESENTATIVES**  
(Stocks Maintained for Immediate Delivery)  
Farmwood, Miss. 711 N. Tangipahoe St.  
Enoch Sales Co.  
Fort Worth, Texas . . . 8th & Grove Sts.  
Axtell Co.  
Greensboro, N.C. . . 714 W. Market St.  
Home Appliance Service Co.  
Houston, Texas . . . 306 M & M Bldg.  
Lingo-Waller Company  
Indianapolis, Ind. . . 229 E. South St.  
F. H. Langenkamp Co.  
Lubbock, Texas . . . 900 Avenue H  
Axtell Co.  
Milwaukee, Wis. . . 512 N. Water St.  
Chase Brass & Copper Co., Inc.  
New Orleans, La. . . 813 Poydras St.

San Angelo, Texas . . . 506 So. Oak St.  
Axtell Co.  
St. Louis, Mo. . . 2817 Laclede Avenue  
Bess & Copper Sales Co.  
Seattle, Wash. . . 314 Ninth Ave., No.  
Harrison Sales Co.  
Sioux City, Iowa . . . 2310 East 8th St.  
National Refrigeration Service  
Springfield, Mass. . . 300 Broad St.  
Melchior, Armstrong, Desau Co., Inc.  
Syracuse, N.Y. . . 314 W. Fayette St.  
Syracuse Supply Company  
Washington, D.C. . . 308 10th St., N.W.  
Refrigeration Equipment & Supply Co., Inc.  
Winnipeg, Man., Canada 156 Bell Ave.  
Arctic Ice and Fuel Co., Limited

**FACTORY REPRESENTATIVES**  
Chicago, Ill. . . . G. C. Taylor, 1344 W. Lake St. (Local Stock)  
Dayton, Ohio . . . E. J. Kimm, 517 Grafton Ave.  
Denver, Colo. . . . Monarch Sales, 1910 California St.  
Detroit, Mich. . . . Thomas B. McLaughlin, 18273 Santa Rosa Drive  
Los Angeles, Calif. . . Van D. Clothier, 1015 E. Sixteenth St. (Local Stock)  
New York, N.Y. . . J. A. Strachan, 806 Graybar Building  
San Francisco, Calif. . . A. W. V. Johnson, Merchants Exchange Bldg. (Local Stock)



**FOREIGN REPRESENTATIVES**  
Australia . . . F. C. Lovelock, Ltd.  
282 Clarence St., Sydney, N.S.W.  
Europe . . . Melchior, Armstrong, Desau Co., Inc.  
116 Broad St., New York, N.Y.  
Hawaiian Islands . . Theo. H. Davies & Co., Ltd.  
Honolulu, T. H.  
Puerto Rico . . . Refrigeration Supply Co., P.O. Box 328,  
Puerto de Tierra, San Juan



# PATENTS

ISSUED SEPT. 12, 1933

1,926,240. VENTILATED REFRIGERATOR DISH. Harvey H. Maas, Sheboygan, Wis., assignor to The Vollrath Co., Sheboygan, Wis., a corporation of Wisconsin. Application March 15, 1933. Serial No. 660,784. 5 Claims. (Cl. 62-1.)

1. A refrigerator dish comprising a rectangular pan having an outwardly turned rim in its upper edges and a cover having a downwardly facing peripheral recess for the reception of the rim and three rim-engaging supporting elements bridging the valley of the recess to not more than one-third of its depth, two of the elements being substantially at the corners of one end and the third being on the opposite end intermediate the corners.

1,926,278. METHOD AND APPARATUS FOR REFRIGERATING AND CARBONATING. Justus C. Goosmann, Chicago, Ill. Application May 10, 1930. Serial No. 451,244. 17 Claims. (Cl. 62-91.5.)

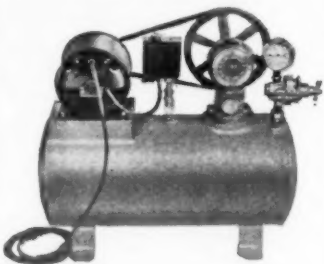
1. The method of preparing a liquid cooling medium for refrigerating purposes by utilizing a solid refrigerant which sublimates, comprising the steps of sublimating a solid refrigerant and circulating the gas formed in heat exchange relation with the remaining medium to effect condensation of the gas to liquid form to provide a liquid cooling medium.

1,926,286. REFRIGERATING PLANT. Erich Kindermann, Berlin-Reinickendorf, West Germany, assignor to Deutsche Gas- und Licht-Auer-Gesellschaft m. b. H., Berlin, Germany, a corporation of Germany. Application July 9, 1929. Serial No. 376,951. and in Germany July 24, 1928. 6 Claims. (Cl. 62-118.)

5. An apparatus of the class described, comprising a generator absorber, an evaporator jacket surrounding said generator absorber, the outer surface of said jacket being exposed to a cooling medium, a liquid-containing tank, a condenser coil in said tank, a connection from the upper portion of said jacket to the upper portion of said condenser coil, a valve connection from the lower portion of said coil to the lower portion of said jacket, said two connections together with said coil and said evaporator jacket forming a closed circuit, and a vaporizable liquid in said circuit, said jacket containing such liquid during the cooling period when the valve connection is open and the generator absorber acts as an absorber, whereby such liquid will promote the transfer of heat from the absorber to the cooling medium which is in contact with the outer surface of the jacket, while during the heating period when the valve connection is closed and the generator absorber acts as a generator, the jacket will be filled with vapors of said liquid to minimize transfer of heat from the generator to the cooling medium which is in contact with the outer surface of the jacket.

1,926,341. APARTMENT REFRIGERATOR. Carl E. L. Lipman, Chicago, Ill., assignor to Lipman Patents Corp., Chicago, Ill., a corporation of Delaware. Application Feb. 27, 1931. Serial No. 518,748. 8 Claims. (Cl. 62-116.)

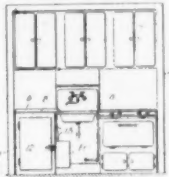
## SCHAEFER'S OILLESS BEER PUMP



A radical departure from the conventional air compressor. This pump was designed for beer pressure work and will give years of satisfactory automatic service. A ready market awaits the live distributor. Write for prices and discounts.

Manufactured by  
**HAROLD L. SCHAEFER, INC.**  
1620 Harmon Place  
Minneapolis, Minnesota

1. The combination of a cabinet having a removable section in the upper wall thereof, with a refrigerating unit remov-



1,926,341

ably associated therewith comprising a cooling element secured to said section and depending into said cabinet, a refrigerant apparatus for supplying said element with refrigerant and a bracket for suspending said apparatus along one side of said cabinet, said bracket being of sufficient length to support said apparatus in position adjacent the bottom of said cabinet, said bracket and apparatus being removable with said section and element by raising and moving transversely.

1,926,384. REFRIGERATING APPARATUS. Harry B. Hull, Dayton, Ohio, assignor to Frigidaire Corp., Dayton, Ohio, a corporation of Delaware. Application Feb. 27, 1931. Serial No. 518,688. Renewed Sept. 28, 1932. 19 Claims. (Cl. 62-116.)

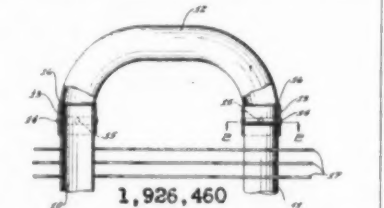
1. A refrigerator comprising a cabinet having a food storage compartment therein, a unitary primary refrigerant circuit removably mounted outside of the food storage compartment, said circuit including a compressor, a condenser and an evaporator, a secondary circuit having a portion within the food storage compartment for cooling the food storage compartment, and a portion fixed to said cabinet and in thermal contact with the evaporator of said first circuit.

1,926,395. PROCESS OF PREVENTING FIRE BY NONTXIC SUBSTANCES. Thomas Midgley, Jr., Worthington, Ohio, assignor to Frigidaire Corp., Dayton, Ohio, a Corporation of Delaware. Application July 31, 1930. Serial No. 472,179. 7 Claims. (Cl. 23-9.)

1. Process which comprises adding to the atmosphere surrounding a possible point of combustion a quantity of an organic halo derivative containing fluorine, and limiting the said quantity added to an amount sufficient to prevent combustion while supporting the existence of human life.

1,926,396. PROCESS OF PREVENTING FIRE BY NONTXIC SUBSTANCES. Thomas Midgley, Jr., Worthington, Albert L. Henne, Columbus, and Robert R. McNary, Dayton, Ohio, assignors to Frigidaire Corp., Dayton, Ohio, a Corporation of Delaware. Application July 31, 1930. Serial No. 472,180. 14 Claims. (Cl. 23-12.)

14. The process which comprises projecting into the atmosphere surrounding a possible point of combustion, a halo-fluoro derivative of methane.



1,926,460

having openings therein through which the straight ends of the tube sections project, a U-shape tube having its ends telescoping the straight ends of the tube sections, said telescoping U-shape tube ends each being formed with a circularly extending bead having an opening there-through, said beads forming a recess surrounding the telescoped tube section ends, and a solid sealing means filling the recesses, said sealing means being introduced through the openings in fluid form.

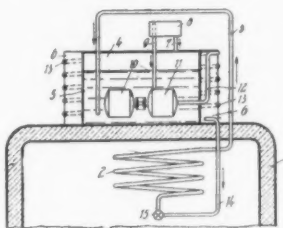
1,926,461. EVAPORATOR. Franklin G. Slagel, Buffalo, N. Y., assignor to Fedders Mfg. Co., Inc., Buffalo, N. Y., a corporation of New York. Application Aug. 13, 1930. Serial No. 475,030. 5 Claims. (Cl. 62-126.)

1. In an evaporator, a header, means for automatically maintaining a quantity of liquid refrigerant in the header, and a tube depending from one end of the header and having an intermediate portion formed in loops arranged in a horizontal plane and extending parallel and longitudinally of the header, the ends of said tube being in communication with the liquid in the header.

1,926,652. TIMED DEFROSTING MECHANISM. Raphael S. Rosenfeld, Brooklyn, N. Y. Application Feb. 23, 1932. Serial No. 594,597. 7 Claims. (Cl. 62-4.)

1. In a defrosting mechanism, the combination of a disk rotatably mounted, of driving means for rotating said disk, means for locking said driving means against operation, a supply control valve, means for operating said valve, and a switch for controlling said operating means.

1,926,654. APPARATUS FOR PRODUCTION OF COLD. Paul Scholl, Berlin-Charlottenburg, Germany, assignor, by mesne assignments, to The Hoover Co.,



1,926,654

North Canton, Ohio, a corporation of Ohio. Application Dec. 26, 1929. Serial No. 416,514, and in Germany Dec. 22, 1928. 3 Claims. (Cl. 62-115.)

1. In apparatus for carrying out the refrigerating process herein described, an evaporator, a motor-driven compressor, an absorption vessel having absorption liquid therein, a gas pipe connecting said absorption vessel with said evaporator and opening into said absorption vessel below the level of the liquid, and a second gas pipe connecting the gas space of said absorption vessel with the suction side of said compressor, said compressor being located in the absorption liquid.

1,926,700. RAILWAY REFRIGERATOR CONTAINER. Samuel H. Owens, Altoona, Pa., assignor to The Pennsylvania Railroad Co., Philadelphia, Pa., a corporation of Pennsylvania. Application Oct. 6, 1932. Serial No. 636,430. 3 Claims. (Cl. 62-91.5.)

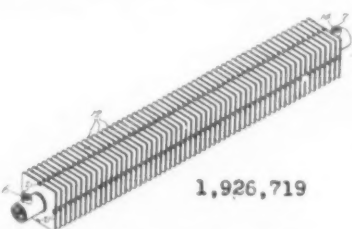
1. In a railway refrigerator container, an outer casing lined with insulating material, an inner shell enclosing the lading to be refrigerated and defining with said outer casing a narrow passage for the circulation of gas, a top bunker for solid carbon dioxide including walls of insulating material attached to said inner shell and isolating the refrigerant space from the lading space, an inner compartment within said bunker including a foraminous base member for supporting the solid carbon dioxide and a vertical partition of insulating material, said foraminous member and partition forming with the bunker walls a continuation of the gas circulating passage aforesaid.

1,926,718. REFRIGERATED DISPLAY CASE FOR BUTCHER SHOPS AND THE LIKE. Carl Fredberg, Chicago, Ill. Application Sept. 9, 1929. Serial No. 391,187. 9 Claims. (Cl. 62-89.6.)

1. A display and storage case of the refrigerated type adapted for use in small stores, said case comprising a narrow elongated body of substantial height and providing a lower display compartment in said body positioned a short distance above the floor, transparent doors for said compartment in the forward side thereof sloping upwardly and rearwardly so as to provide a clear view of the products in said compartment from a point in front of the case and above the compartment, said doors being movable so as to permit of access into said compartment, said case also providing a second compartment above said lower compartment, said second compartment having transparent doors in its forward side offset forwardly from the upper edge of the doors of said lower compartment so as to provide a compartment of substantial depth, and cooling means in said case adapted to induce a circulation of air through said compartments.

1,926,719. REFRIGERATING APPARATUS. Winfield S. Gibbs, Jr., Philadelphia, Pa., and Howard R. Lukens, Woodbury, N. J., assignors to American Engineering Co., Philadelphia, Pa., a corporation of Pennsylvania. Application July 8, 1931. Serial No. 549,548. 6 Claims. (Cl. 257-249.)

1. A refrigerating unit comprising a plurality of hollow cylindrical casings, adapted for substantially horizontal instal-



1,926,719

lation, and fittings at the ends of said casings defining intake and discharge ports, different ones of said fittings communicating with upper and lower portions of the casings and extending therefrom in the transverse direction, said fittings being so constructed and arranged that said casings may be connected either in series or in parallel.

1,926,767. AUTO ICER. Ira C. Furniss, Columbus, Ohio. Application Oct. 28, 1932. Serial No. 640,093. 7 Claims. (Cl. 62-117.)

1. The combination with a motor vehicle body and the ignition devices thereof, of a drinking water tank carried by the body, water pipes connected to the tank and located within the body, an outlet inside the body, electric refrigerating apparatus operated by said ignition devices for cooling the water in the tank, a water pump connected to said pipes and a motor driven by said ignition devices and driving the pump.

1,926,810. REFRIGERATING APPARATUS. Carl F. Kuhls, Dayton, Ohio, assignor to Frigidaire Corp., Dayton, Ohio, a corporation of Delaware. Application Jan. 30, 1929. Serial No. 336,263. 6 Claims. (Cl. 220-9.)

1. A refrigerator cabinet comprising a box-like, sheet metal, food compartment

lining having a door opening, insulation on the outside of said lining, a relatively non-conducting door jamb secured around said door opening, front paneling secured to said door jamb, side panels in interlocking relation with said front paneling, a back panel interlocking with said side panels, and spacing members between said side panels and said back panel.

1,926,831. MILK COOLING DEVICE. Henry Atwell, Lake Villa, Ill. Application July 25, 1931. Serial No. 553,038. 11 Claims. (Cl. 257-199.)

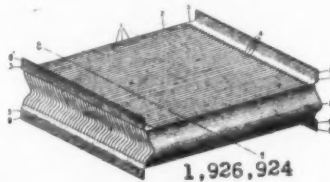
1. An apparatus of the kind described consisting of a fluid conduit formed with a loop intermediate its ends, the ends being offset transversely at either side of the top of the loop, a supply conduit detachably connected to one end, and a flexible discharge conduit connected to the other end and being of a length to extend downwardly to the base of a container and at least partially around said container within which the loop may be positioned, said discharge conduit being closed at its extreme end, and provided with spaced discharge openings in the wall thereof of a character to direct a fluid upwardly about said container.

1,926,908. TROUGH FOR MILK COOLERS. Albert T. Light, Canton, Ohio, assignor to York Ice Machinery Corp., York, Pa., a corporation of Delaware. Application June 16, 1931. Serial No. 544,860. 5 Claims. (Cl. 220-1.)

1. A trough comprising a channel-shaped sheet metal member; a pair of longitudinal reinforcing tubes, each having a slot throughout its length; a pair of end plates, said end plates each having a slot corresponding with the shape of said member of a cylindrical recess at each end of the slot; and a plug fitting into each end of each of said tubes and into one of said recesses, said member being soldered into the slots in said tubes and said end plates.

2. A trough comprising a pair of abutting channel-shaped sheet metal members, said trough having an opening on its underside intermediate the ends thereof; and a yoke-shaped support secured to said members at their abutting ends, said support having a discharge passage therethrough, said passage and opening being in coincident relation.

1,926,924. SINUSOIDAL AIR FILTER AND MEDIUM. Sig G. Son Sylvan, Bradford, Pa., assignor, by mesne assignments, to American Air Filter Co., Inc., Louisville,



1,926,924

Ky., a corporation of Delaware. Application April 30, 1928. Serial No. 274,039. 10 Claims. (Cl. 183-79.)

8. A device for separating particles from air or gas streams having between two opposed side wall limits a plurality of air deflecting members arranged to provide along the depth of the filter tortuous air deflecting passages, the air deflecting members along the said wall limits being exposed laterally outward from the unit and arranged so that they are capable of cooperating with similar members of adjacent units to produce a filtering area therebetween.

1,926,933. AIR FILTER. Hans E. Birkholz, Chicago, Ill., assignor by mesne assignments, to American Air Filter Co., Inc., Louisville, Ky., a corporation of Delaware. Application Nov. 22, 1928. Serial No. 321,085. 11 Claims. (Cl. 183-63.)

1. An air filter of the class in which the filtering member thereof is movably mounted in an air passageway and provision is made for collection of dust by a fluid on the surface of the filtering member, a plurality of pivotally connected filtering elements each composed of a series of superposed layers of reticulated metal

and including a mat of closely compacted metallic wire.

1,926,947. REFRIGERATOR CABINET. Robert Winter Hull, Connersville, Ind., assignor to Rex Mfg. Co., Connersville, Ind., a corporation of Indiana. Application March 12, 1932. Serial No. 598,487. 2 Claims. (Cl. 220-9.)

1. A refrigerating cabinet having a compartment provided with a door framework, a door hinged to said framework, a liner forming the interior of said compartment, insulation applied to said liner, a one-piece supporting member shaped to form the top, back and bottom of said compartment and secured over said insulation, said member having flanges extending from the sides thereof as means for securing finishing plates to said cabinet and having cut-out portions at the corners of the front edges adapted to fit around the framework to hold the member in fixed position, substantially as set forth.

1,926,978. EVAPORATING COIL STRUCTURE FOR REFRIGERATING SYSTEMS. Norman H. Gay, Los Angeles, Calif. Application Dec. 28, 1931. Serial No. 583,518. 9 Claims. (Cl. 62-126.)

2. An evaporator structure for a refrigerating system comprising inlet and outlet headers, evaporating coils for establishing communication between said headers, at least one of said coils comprising a branched conduit having a single connection to said inlet header and a plurality of connections to the outlet header, and a liquid refrigerant return connection between said headers.

## REISSUES

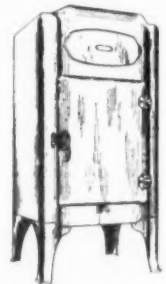
18,941. REFRIGERATING APPARATUS. Jesse G. King, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corp., a corporation of Delaware. Original No. 1,761,041, dated June 3, 1930. Serial No. 243,987, Dec. 31, 1927. Application for reissue Feb. 23, 1932. Serial No. 594,675. 12 Claims. (Cl. 220-24.)

8. A cover for an opening in an ice cream cabinet comprising in combination a top plate, a bottom plate, a spacer separating the plates near their edges, means holding the plates together, the top plate projecting beyond the spacer and a supporting plate for the cover disposed between the top plate and the spacer and projecting beyond the spacer.

18,942. DISH AND COVER. Frederick S. Morris, deceased, late of Sheboygan, Wis., by The Vollrath Co., Sheboygan, Wis., a corporation of Wisconsin, assignee. Original No. 1,661,943, dated Nov. 17, 1925. Serial No. 528,225, Jan. 10, 1922. Application for reissue June 28, 1933. Serial No. 677,869. 7 claims. (Cl. 65-59.)

## DESIGN

90,653. DESIGN FOR A REFRIGERATOR CABINET. Walter Parks Gray, Cincinnati, Ohio, assignor to The Crosley



90,653

Radio Corp., Cincinnati, Ohio, a corporation of Ohio. Application March 23, 1933. Serial No. 47,555. Term of patent 7 years. The ornamental design for a refrigerator cabinet as shown.



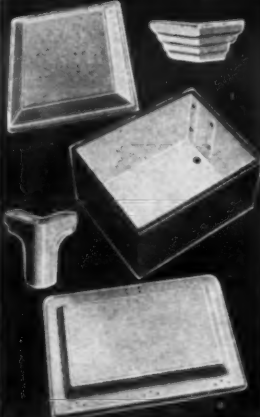
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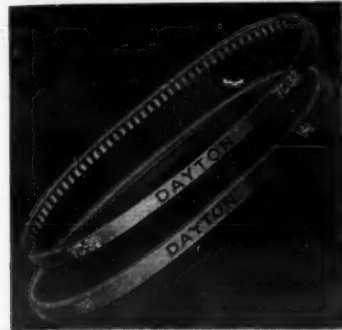
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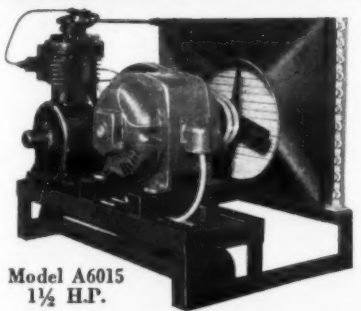
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ERN 9-27-33

**ELECTRICAL SUPPLY  
BUSINESS IMPROVES**

NEW YORK CITY—That there has been a definite forward movement in the electrical supply trade during recent months is indicated in a survey of the industry just completed by Dun & Bradstreet, Inc., here.

During the past eight months, dollar sales of electrical supplies have increased between 5 and 20 per cent over those of the same period last year, with the range of increase in unit sales being nearly as great, the survey shows.

States the report: "Stocks are averaging from 20 to 35 per cent larger than at this time last year. The outlook is considered more encouraging, and leading supply houses expect to round out the year's business with at least a small margin of profit, despite the fact that continued tardiness of collections is retarding progress to no small degree."

**Unfilled Orders Decrease**

The survey continues: "Although the backlog of unfilled orders has been diminishing during the last 30 days, production schedules generally are higher than they were a year ago. Total orders for the second quarter not only exceeded that of the first one, but rose above the figures for the comparative three months of 1932."

"The usual summer let-down in operations was prevented by the strong improvement in the nation's business. Orders for the largest types of electrical installations have been noticeably absent, but some improvement in this branch is expected when contracts will have been let for the large amounts of electrical equipment required for the war vessels to be constructed by the Navy Department."

"Shipments of the smaller types of industrial equipment and supplies, on the other hand, have been enlarging steadily. During the past three years of comparative industrial idleness, many plants had borrowed parts from idle machines to keep those in operation in running order."

**Production Increased**

"Reviving business, therefore, found equipment unequal to requirements, and there has been a strong inflow of orders for parts of every description."

"During the summer, production of refrigerators not only increased from 50 to 200 per cent over the monthly average of the past five years, but the all-time record for the output during any single month was surpassed. Twenty-four-hour schedules were general, and shipments ranged from six to eight weeks behind orders."

"The general volume of electrical supply sales during the eight months of the current year ran ahead of the comparative level of 1932, despite the poor showing made in the first quarter."

"Refrigerators easily took the rank of precedence in the sales totals, with a strong second provided by washing machines, the movement in both virtually being one from the manufacturer to the consumer, as dealers' stocks are negligible."

**Lighting Fixtures Sluggish**

"The demand for lighting fixtures and wiring has been rather sluggish, due largely to the lack of building activity, and the advance of prices and the increased labor costs have caused some slowing down in installation work during the last 60 days."

The larger purchases of industrial customers, who are ordering diversified materials to rehabilitate plants, have been particularly encouraging, as this class of business had been dormant for nearly three years.

"Demand for small-sized motors has picked up to such an extent that manufacturers have been compelled to augment working forces, in order to meet shipping dates. The reconditioning of plants has been one of the chief sources of business for this division during the last four months."

"Expansion of general industrial activity has been paralleled by that of electric output. For, with the week ended Sept. 9, the production of electricity has been above the figures for the comparative period of 1932 for 19 consecutive weeks."

**Power Output Up**

"Conservative estimates now place the 1933 power use at 4.1 per cent above last year's figures, as for the 35 weeks to Sept. 2 the total output was 52,824,727,000 kilowatt hours, compared with 51,784,740,000 kilowatt hours in the corresponding period last year, an increase of 2.01 per cent."

"Thus far, price rises in this trade have been neither general nor pronounced," the survey points out, "as some items still are selling 7 to 10 per cent below the quotations of a year ago."

"The downward price trend, however, appears to have been checked definitely around June 1, as revisions made since that date have been in an upward direction and decided advances are expected to be recorded as soon as the NRA plans have had an opportunity to operate."

"Copper wiring and other construction materials are selling as much as

25 per cent higher, rubber-covered wire has advanced 50 to 75 per cent, while many appliances have been marked up from 5 to 10 per cent. Only minor changes have appeared in the quotations on fuses, switches, and lamps.

**Prices May Go Higher**

"Advancing quotations for many of the raw materials used in the manufacture of mechanical refrigerators are likely to force prices higher for the finished products."

"The retail prices prevailing during the summer months, which, as a whole, were the lowest on record, were made possible by the steadily declining trend of the quotations on steel, scrap aluminum, and other materials before the general upturn in business started."

"Collections have not improved to any extent, and close supervision is being maintained in the granting of credit. It still is difficult to obtain payments of any size from old delinquents, and only small reductions have been made in indebtedness carried over from last year. This had handicapped manufacturers in their endeavor to aid retailers in stocking much-needed merchandise."

**Recession in Failures**

"The encouraging recession in failures, which started in 1932, has been more accentuated during the eight months of the current year."

"While the monthly average of the number of defaults has been reduced only slightly from last year's showing, the monthly average of involved liabilities has been lowered by nearly 35 per cent."

"The high point of the insolvency record was touched in 1931, when the number rose to 217 and the defaulted indebtedness to \$4,822,234; in 1932, these figures dropped to 209 and \$4,589,173, respectively."

"Complete insolvency record of the electrical supply trade since 1927, including the eight months of the current year, as compiled by Dun & Bradstreet, shows:

	Manufacturers	
1927.....	19	\$ 897,592
1928.....	16	257,400
1929.....	13	232,900
1930.....	24	453,848
1931.....	57	2,571,258
1932.....	40	1,306,119
1933.....	23	320,322

	Wholesalers and Retailers	
1927.....	157	\$2,259,738
1928.....	126	4,047,229
1929.....	123	2,455,900
1930.....	160	2,250,976
1931.....	169	3,283,054
1932.....	89	1,697,459

\*January to August, inclusive.

**QUESTIONS****Distribution by Cities**

No. 1371 (Advertising Agency, New York)—"We are searching for a report which will give the number of electric refrigerators in homes of cities of 250,000 population and over, for 1932, if possible; if not, the latest year available."

"This information is not obtainable from the Department of Commerce nor through the refrigeration division of the Edison Electric Institute."

Answer—No authentic figures are available showing sales of electric refrigerators by cities of various population classifications. The nearest approach to such statistics are the figures showing sales by states of company members of the Refrigeration Division of the National Electrical Manufacturers Association (Nema). These figures are published in ELECTRIC REFRIGERATION NEWS for each month as released.

**Wire Egg Basket**

No. 1372 (Distributor, Minnesota)—"We are trying to find a manufacturer of a wire egg basket for placing in an electric refrigerator."

Answer—Union Steel Products Corp., Albion, Mich.

**Air Specialties Mfg. Co.**

No. 1373—"We would appreciate you forwarding to us the address of Air Specialties Mfg. Co."

Answer—900 N. Spaulding Ave., Chicago, Ill.

**Handy Heater Spoon**

No. 1374—"Would you kindly give me the address of the Handy Heater Co. of Detroit. I would like to know a little more about the 'spoon' as described on page 6 of your Aug. 23 issue."

Answer—Manufactured by Vacuum Electric Co., United Artists building, Detroit, Mich.

**Replacement Parts**

No. 1375—"Can you furnish the names of companies selling service parts to be used in independent service for all machines or for a number of machines?"

Answer—Companies specializing in replacement parts for various makes of electric refrigerators are: Chicago Refrigeration Service Co., 360 E. Grand Ave., Chicago, Ill. Home Appliance Service Co., Inc., 714 W. Market St., Greensboro, N. C. Iceless Refrigeration Accessories Co., 2401 Chestnut St., Philadelphia, Pa. Melchior, Armstrong & Dessau Co., 116 Broad St., New York, N. Y.

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Refrigeration Service, Inc.  
3109 Beverly Blvd., Los Angeles, Calif.  
Refrigerator Parts Co.  
2021 S. Michigan Ave., Chicago, Ill.

**Dehydrating Ovens**

No. 1376 (Display Case Manufacturer, Michigan)—"We are preparing to install equipment for the purpose of testing and dehydrating coils after they are installed in our cases. Could you tell us where we might pick up a small portable steam unit which would be suitable for a steam hook-up for dehydrating?"

Answer—Manufacturers of dehydrating ovens are:

Despatch Oven Co.  
627 Ninth St., S. E., Minneapolis, Minn.  
Drying Systems, Inc.  
1800 Foster Ave., Chicago, Ill.  
Young Bros. Co.  
6500 Mack Ave., Detroit, Mich.

**Refrigerator Manufacturers**

No. 1377—"Please advise me as to how I could get a list of refrigerator manufacturers who would be interested in a new type of rubber gasket or bumper."

Answer—See page 302 of the 1932 REFRIGERATION DIRECTORY and MARKET DATA BOOK for list of manufacturers of household electric refrigerators.

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